

Research article

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Revision of *Monolepta* Chevrolat, 1836 from the Sundaland area (Coleoptera: Chrysomelidae: Galerucinae)

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54. contribution to the taxonomy, phylogeny and biogeography of the Galerucinae

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Abstract. Species of *Monolepta* Chevrolat, 1836 currently known from the Sundaland area are taxonomically revised. The region covers the states of Malaysia, Singapore, Brunei and Indonesia including the Wallacea-Subregion (without Irian Jaya on New Guinea). About 2300 specimens, mainly from museal collections, from this area are checked, all relevant literature is considered and the type material is examined. Out of 72 species originally described in *Monolepta* and occurring in this region, only 13 valid species (including five new synonymies) can remain in *Monolepta* when phylogenetical aspects are considered: *M. bifasciata* (Hornstedt, 1788) (*Chrysomela bifasciata* Hornstedt, 1788; = *Cryptocephalus multicolor* Gmelin, 1790; = *Crioceris quadrinotata* Fabricius, 1801; = *Luperodes latefascia* Motschulsky, 1858; = *M. parvonotata* Jacoby, 1886, syn. nov.; = *M. mustaphai* Mohamedsaid, 1997, syn. nov.; = *M. entimauensis* Mohamedsaid, 1998, syn. nov.); – *M. flavofasciata* Jacoby, 1889. – *M. mentawaiensis* (Jacoby, 1896) (= *M. basalis* Jacoby, 1884; = *M. hageni* Weise, 1916, syn. nov.). – *M. jacobyi* Weise, 1908. – *M. marginicollis* Jacoby, 1896. – *M. militaris* Jacoby, 1896. – *M. orientalis* Jacoby, 1889 (= *M. konbiriensis* Duvivier, 1891). – *M. putri* Mohamedsaid, 2001. – *M. rubra* (Gyllenhal, 1808) (= *Luperodes javanensis* Jacoby, 1887). – *M. rufipennis* Jacoby, 1899. – *M. signata* (Olivier, 1808) (*Galeruca signata* Olivier, 1808; = *Crioceris neglecta* Sahlberg, 1823: 72; = *Luperodes quadripustulatus* Motschulsky, 1858; = *Luperodes hieroglyphicus* Motschulsky, 1858; = *M. elegantula* Boheman, 1859: 183; = *Luperodes dorsalis* Motschulsky, 1866: 415; = *Luperodes quadriguttata* Fairmaire, 1887: 333; = *M. picturata* Jacoby, 1896; syn. nov.; = *M. simplex* Weise, 1913). – *M. tiomanensis* Mohamedsaid, 1999. – *M. zonula* Weise, 1916. Other species originally described in *Monolepta* occurring in the region are still or need to be transferred to other genera. Eight species are newly described: *M. bruneiensis* sp. nov., *M. empatbulat* sp. nov., *M. hitam* sp. nov., *M. kuninghitam* sp. nov., *M. marginicolloides* sp. nov., *M. mohamedsaidi* sp. nov., *M. ranuensis* sp. nov., *M. sulawensis* sp. nov. An identification key for the 21 species, a checklist of the current taxa of *Monolepta* from Sundaland, and a list of species originally described in *Monolepta* occurring in this region that still are or need to be transferred to other genera are provided.

Key words. Taxonomy, nomenclature, new species, redescription, new synonym, lectotype, distribution maps, identification key, Oriental Region.

INTRODUCTION

Monolepta Chevrolat, 1836 is the most species rich group in Galerucinae, and has a wide distribution in tropical and subtropical regions of the world. Wilcox (1973) has listed 600 species worldwide. At least 260 nominal species are recorded from the Oriental Region, and about 72 species occur in Sundaland area (Kimoto 1990; Mohamedsaid 2001, 2004, 2005). Particularly in the Oriental Region, the group has been studied by several authors (Maulik 1936; Gressitt & Kimoto 1963; Kimoto 1989; Mohamedsaid 2004). For many years, the limitation and taxonomic status of *Monolepta* were uncertain. Maulik (1936) for instance realized this problem but decided to maintain the

status quo and provided two sets of keys for *Monolepta*; one for species with a pronotal depression and another one without pronotal depression. Wilcox (1973) has also indirectly commented about the inhomogeneous classification and systematic of *Monolepta* and some other genera in “Monoleptites” and proposed to revise this group in the future.

Despite so many species that have been subsequently described in *Monolepta*, a revision, taking all described species into account, has never been done so far. A revision of the Afrotropical taxa was started in Wagner (1999), and more recent data were provided in Nie et al. (2017), where 708 species are listed. With the revision on the genotype, *M. bioculata* (Fabricius, 1781), a new concept

of the genus taking phylogenetic aspects into account, was given (Wagner 2004, Stapel et al. 2008). As a result of the revision, many changes in number of species and allocation of species to genera in Afrotropical taxa was published, and out of 180 species originally described in *Monolepta* from Africa, only 50 valid species remained, 40 species were treated as, mainly new, synonyms, and 90 species needed to be transferred to other genera, due to their phylogenetic position. On the other hand, 50 new species were described (Wagner 2007, 2017).

The ongoing revision of Afrotropical taxa (overviews in Wagner 1999, 2004, 2017) was not only the first step taken in revising *Monolepta*, on a larger geographical scale, but as well the first step in consequently describing the genitalic characters for all taxa of *Monolepta*. The previous authors have, with very few exceptions, depended on external morphology and colouration pattern only, but in particular the colouration pattern is highly variable within many species, and in most cases not suitable for species identification.

A revision of *Monolepta* on a worldwide scope is a gigantic task. Revision of species from a selected geographical area can be a step in the right direction. The Oriental Region consists of the Indian subcontinent including Pakistan, south of the Pamir and the Himalayas, Myanmar (formerly Burma), Indochinese and Malay Peninsulas, Indonesia including Malay Archipelago (formerly the East Indies) to Timor and Sulawesi (formerly Celebes), the Philippines, Taiwan, southern China from the Tsinling Mountains and the Tibetan Scarp and southern Japan. Some recent local contributions with focus to the fauna of *Monolepta* were published from Taiwan (e.g., Lee 2009, 2018, 2020), the Philippines (Medvedev 2005), Vietnam (Nguyen & Gómez-Zurita 2017), and China (Lei et al. 2021).

Due to the high number of *Monolepta* from the entire Oriental Region, we focused on the species of “true” *Monolepta* known from the Sundaland in this work. This area comprises Malaysia (Peninsular Malaysia, Borneo states), Brunei, Singapore and Indonesia without Irian Jaya, that definitely belongs to the Australian Region, while Sulawesi and all other islands of Wallacea, as intermediate area between the Oriental and Australian Region (Lohmann et al. 2011, Mohammedsaid 2009) are included here. There are 72 species originally described in *Monolepta* recorded in this region.

In the course of our revision, only 13 valid species can remain in *Monolepta* in the sense of the generotype *M. bioculata* (Wagner 2007), next to 13 synonyms recognized by previous authors (see also Wagner & Bieneck 2012), we found further five new synonyms (for these taxa. These 13 taxa of “true” *Monolepta* are herein redescribed, further eight are newly described. A key to species, current checklist of valid species of *Monolepta* from Sundaland, and a list of species from this region that need to be transferred to other genera, are provided.

MATERIALS AND METHODS

A total of 2375 labelled specimens from several major collections have been examined in this study. Fresh material is also included, but the number is far more little than dried museal specimens. The acronyms of collections and institutions that are involved in this study are explained below and responsible curators are given in parentheses.

The Natural History Museum, London (BMNH; M. Barclay, M. Geiser); Brigham Young University collection, Provo, Utah (BYUC; Shawn Clark); Collection of Jan Bezděk, Brno, Czech Republic (CJB); Collection of Haruo Takizawa, Japan (CTJ); Instituto de Investigação Científica Tropical, Lissabon, Portugal (ICTZ; L. Mendes); Institute Royal des Sciences Naturelle de Belgique, Brussel (IRSN; P. Limbourg); Museo Civico di Storia Naturale, Genova (MCGD; R. Poggi); Museum of Comparative Zoology, Harvard University (MCZH); Museum für Naturkunde, Berlin (MNHU; J. Frisch, J. Willers); Swedish Museum of Natural History Stockholm (NHRS; J. Bergsten, B. Viklund); Naturkundemuseum Erfurt (NME; M. Hartmann); Nationaal Natuurhistorisch Museum, Leiden (RMNH; F. van Assen); Centre for Insect Systematics, UKM, Malaysia (UKM; R. Yusop); Zoological Institute St. Petersburg (ZISP; A. Kirejtshuk); Zoological Museum of Kiel University (ZMUK; M. Kuhlmann).

A standard set of figures is given for each species, scale line in figures is 1 mm, different scales for colouration pattern and genital structures and basal antennomeres. These include illustrations of the colouration (dorsal view), including the right antenna, where black colouration is indicated by black, yellow colouration by white, red colouration by light grey, and brown by dark grey shading. The antennomeres, usually of one male and one female, dorsal, ventral and lateral view of the median lobe including endophallic structures, spermathecae of up to three females, and bursa-sclerites (if applicable) are figured. Measurements were made for external characters. Absolute measurements are total length from the clypeus to apex of the elytron, length of the elytron, maximal width of both elytra (usually in the middle or posterior third of the elytra), and width of the pronotum. Relative measurements are length to width of the pronotum, maximal width of both elytra to length of the elytron, length of the second to third antennomeres, and length of the third to fourth antennomeres. A number of specimens measured are given in the description under “total length”. Further materials examined are listed, and all label data are re-written. Material is arranged by the states in alphabetical order, and in chronological order within states. For location data, geographical coordinates were given in degree and minute. These coordinates were mostly taken from Google Earth. The distribution maps have been produced by ArcGis.

Jan Bezděk generously provided us with photographs of some type specimens from MCGD and NHRS he did during visits in those collections. Labels of those specimens are cited literally, but the photographs are not given here.

REDESCRIPTION OF SPECIES

Monolepta bifasciata (Hornstedt, 1788)

Figs 1–6

Chrysomela bifasciata Hornstedt, 1788: 3 (transferred to *Monolepta*; Jacoby 1884a: 53).

= *Cryptocephalus multicolor* Gmelin, 1790: 1712 (syn. by Weise 1924: 166).

= *Crioceris quadrinotata* Fabricius, 1801: 460 (syn. by Weise 1924: 166).

= *Luperodes latefascia* Motschulsky, 1858: 104 (syn. by Maulik 1936: 408)

= *Monolepta parvonotata* Jacoby, 1886: 97; syn. nov.

= *Monolepta mustaphai* Mohamedsaid, 1997: 204; syn. nov.

= *Monolepta entimauensis* Mohamedsaid, 1998: 248; syn. nov.

Type material. *Chrysomela bifasciata*. Type material is not available to us. We adopt Weise's (1924) statement that *Crioceris quadrinotata* Fabricius, 1801 is a junior synonym of this species, which type material is available.

Cryptocephalus multicolor. Type material is not available to us. We adopt Weise's (1924) statement that this species is a junior synonym of *M. bifasciata* (Hornstedt, 1788).

Crioceris quadrinotata. Syntype: 1 ex. "C. 4-notata Sumatra Daldorff / Type" (ZMUK; Fig. 0).

Luperodes latefascia. Lectotype: ♂, "Luperodes latefascia Motsch., Ind. Or" (ZISP; Fig. 1). Paralectotypes, 4 ex., same data as lectotype (ZISP). All five syntypes were originally glued tightly together on one card. The lectotype, the male paralectotype and one female paralectotype are now each on one card, two female paralectotypes together on one card (Wagner & Bieneck 2012: 211).

Monolepta parvonotata. Syntype: ♀, "parvonotata Jac. (Monolepta) / Type 18453 / Sumatra, Mt. Singgalang, Luglio 1878, O. Beccari / 1st Jacoby Coll." (MCZH; Fig. 2). Type locality: 0°23' S/100°19' E. Jacoby gave no details on specimen numbers and next to the one in MCZH, there are further types in BMNH and MCGD. There are two specimens from the Jacoby collection in BMNH labelled "co-type". These are invalid types since they are not from the type locality.

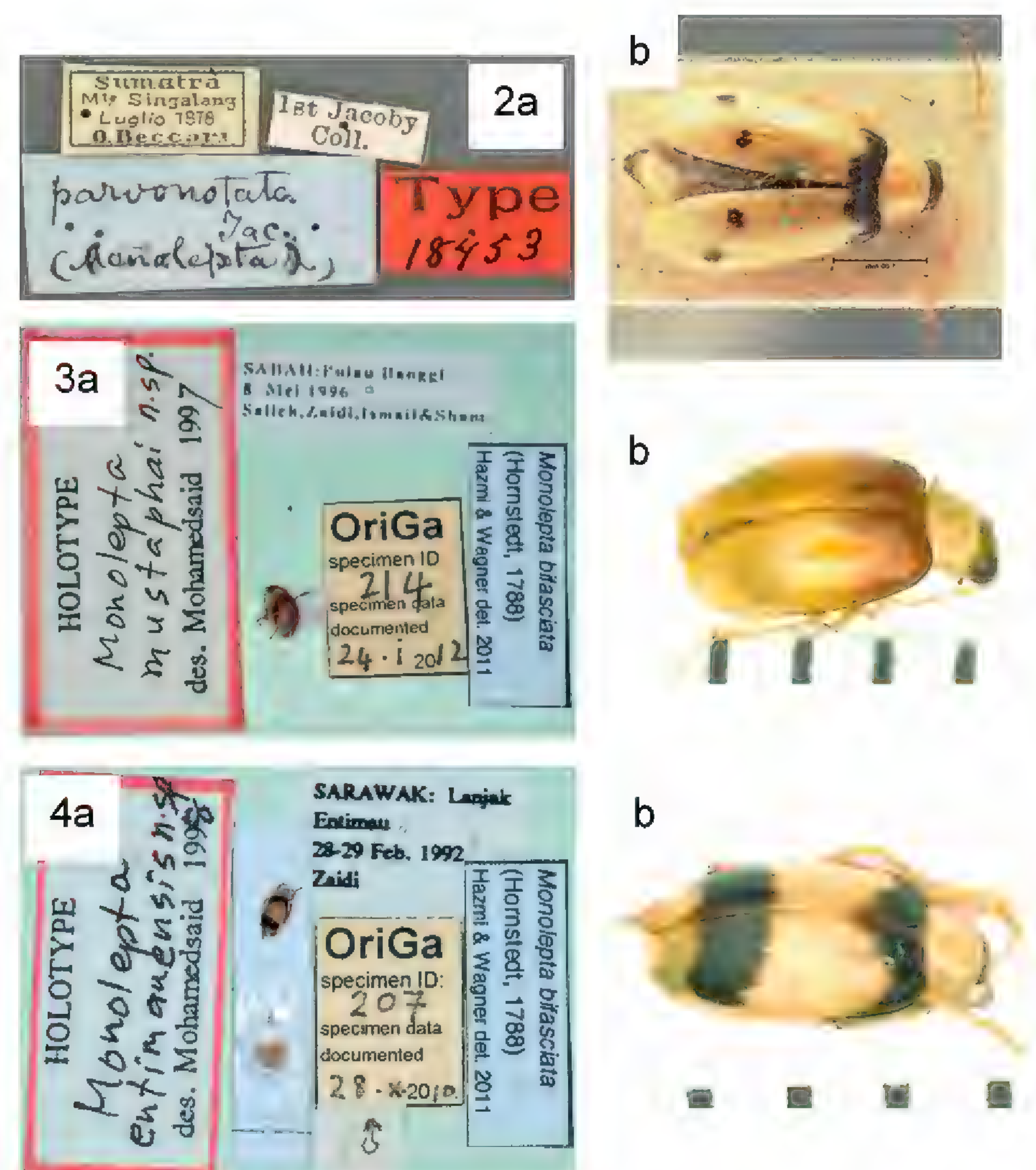
Monolepta mustaphai. Holotype: ♂ "Sabah, Pulau Banggi, 8-12. Mei 1996, Salleh, Zaidi, Ismail & Sham / Holotype *Monolepta mustaphai* n. sp. des. Mohammed-



Figs 0–1. Type material of *Monolepta bifasciata* (Hornstedt, 1788). I. 1. *Crioceris quadrinotata* Fabricius, 1802, syntype (ZMUK). 1. *Luperodes latefascia* Motschulsky, 1858, lectotype, ♂ (ZISP).

said 1997" (UKM; Fig. 3). Paratypes. 1 ♂, 2 ♀, same data as holotype (UKM). Type locality: 7°16' N/117°09' E.

Monolepta entimauensis. Holotype: ♂ "Sarawak: Lanjak Entimau, 28-29 Feb. 1992, Zaidi / Holotype *Monolepta entimauensis* n. sp., des. Mohamedsaid 1998" (UKM; Fig. 4). Paratypes: 3 ♂, 4 ♀, same data as holotype (UKM). Type locality: 1°11' N/111°51' E.



Figs 2–4. Type material of *Monolepta bifasciata* (Hornstedt, 1788) II. 2. *Monolepta parvonotata* Jacoby, 1886, syntype, ♀ (MCZH). 3. *Monolepta mustaphai* Mohammedsaid, 1997, holotype, ♂ (UKM). 4. *Monolepta entimauensis* Mohammedsaid, 1998, holotype, ♂ (UKM).

Note. Weise (1924: 166) also synonymized *Monolepta rubrosignata* Boheman, 1859: 182 with *M. bifasciata*. As photos of a syntype from NHRS ("Manilla / Kinb. / Type / rubrosignata Bhm.,) clearly indicate, this species is not a *Monolepta* and belong most likely to *Nadrana* Baly, 1865.

Further material examined. – **Australia.** 1 ex., N. Queensland, 4.XII.1938, Redlynch (BMNH); 2 ex., Qid. Tully, Mission Beach, 23.VIII.1976, D. C. Geijskes (RMNH). – **Bangladesh.** 1 ex., Bengal, Mandar, 23°41' N/90°21' E, VII.91, Cardon (IRSN); 2 ex., Belgau, 15°51' N/74°30' E (BMNH); 3 ex., Bengal, Sarda, 23°41' N/90°21' E, F. W. C (BMNH). – **Cambodia.** 3 ex., Prek Toal (Tonle Sap Lake), 12°55' N/104°03' E, 27.V.2003, Light trap, J. Constant et al. (IRSN). – **East Timor.** 29 ex., Raimundo, Timor, No 549 (ICTZ). – **India.** 7 ex., Jawanlagiri, Ayur, Denkanikota, North Salem, 12°34' N/77°47' E, III.–VII.1930, F.R.I. Sandal, Insect Survey (BMNH); 1 ex., Shimoga, 1865 ft., 13°55' N/75°34' E, 25.V.1936, P. S. Nathan (BMNH); 10 ex., Nilgiri Hills, Cherangode, 11°25' N/76°30' E, II.1950, Susai Nathan P. (IRSN); 2 ex., Coimbatore, 11°01' N/76°58' E, 2.IX.1950, P. Susai Nathan (IRSN); 17 ex., S. Coorg-Ammanit, 3100 ft., 12°25' N/75°44' E, II.–XI.1952, P. S. Nathan (IRSN); 4 ex., Anamalai Hills, Chinchona, 3500 ft., V.1964, P. Susai Nathan (RMNH); 1 ex., Anamalai Hills, Cinchona 350 ft., IV.1967, P. S. N (MNHU). – **Indonesia.** 1 ex., Java, Batavia, 6°12' S/106°50' E, Grabowsky (MNHU); 2 ex., O. Borneo, Pajau River, Mjöberg (NHRS); 3 ex., Flores, 8°03' S/120°09' E, Wallace (BMNH); 4 ex., O. K. Sumatra, Dolokmerangir, coll. V. Eldik (RMNH); 10 ex., Java, Propeoek-Tegal, IX.1909, Valek Lucassen (RMNH); 1 ex., Palembang, Sumatra, 2°59' S/104°45' E, M. Knappert (RMNH); 2 ex., Java,

Delanggoe, W. Grippeling; N. C. Pilpers (RMNH); 16 ex., Sumatra, Deli, 3°35' N/98°39' E, d Bury (RMNH); 1 ex., Semarang, 6°58' S/110°25' E, Coll. Veth (RMNH); 1 ex., Bandung, 6°54' S/107°36' E, Coll. Veth (RMNH); 1 ex., Lombok, 8°39' S/116°19' E, Coll. Veth (RMNH); 1 ex., Celebes, 1°50' S/120°31' E, Coll. Veth (RMNH); 8 ex., Soerol, 0°35' S/101°20' E, Coll. Veth (RMNH); 1 ex., Maero Laboe, Coll. Veth (RMNH); 1 ex., Soepajang, 0°27' S/100°54' E, Coll. Veth (RMNH); 2 ex., N. O. Sumatra, Tandjong Morawa, Serdang, 0°35' S/101°18' E, Dr. B. Hadgen (RMNH); 1 ex., Rawas, 1°11' S/132°13' E (RMNH); 1 ex., Nias, 1°07' N/97°31' E, J. D. Pasteur (RMNH); 8 ex., Sumatra, Padang, 0°57' S/100°21' E, J. D. Pasteur (RMNH); 2 ex., Serdang, Sumatra, 0°55' S/102°4' E, Schag (RMNH); 3 ex., Boengamas, Palembang, 2°59' S/104°45' E, J. C. Hasselt (RMNH); 1 ex., Batavia, 6°12' S/106°50' E, Semme Link (RMNH); 1 ex., Soekaranda, Kampong, 0°37' N/94°29' E, J. C. van Hasselt (RMNH); 3 ex., Java, Gedeh (MNHU); 1 ex., S. O. Borneo, Grabowsky (MNHU); 2 ex., Sumatra, Pagh-erang Pisang, X.1890.–III.1891, E. Modigliani (BMNH); 4 ex., Sumatra, Balighe, X.1890.–XII.1891, E. Modigliani (BMNH); 1 ex., Sumatra, Si Rambe, 6°11' S/106°48' E, XII.1890.–III.1891, E. Modigliani (BMNH); 2 ex., Java occident, 4000 ft., 1893, H. Fruhstorfer (BMNH); 29 ex., Sumatra, Manna, 4°30' S/102°58' E, 1902, M. Knappert, Coll. Veth (RMNH); 2 ex., Malabar, Fry Coll. 27.V.1903, light trap, J. Constant et al. (IRSN); 1 ex., G. Oerangan, Java, III.1906, Drescher (MNHU); 1 ex., N. O. Sumatra, Prov. Langkat, 1906, E. Heinze (MNHU); 1 ex., W. Sumatra, Kambang, 23.–24.XI.1908, Schoede (MNHU); 10 ex., Java, Bantam, Preanger, de Vos, IX.1909, Valck Lucassen (RMNH); 3 ex., Sumat., Matur. Fort De Kock, X.1913, Edw. Jacobson, Coll. Veth (RMNH); 1 ex., Sumatra, Sungai Penok, Korinchi Valley, 2600 ft., III.1914 (BMNH); 1 ex., Mt. Banahao, 20.VI.1914, G. Boettcher (MNHU); 2 ex., Java, Preang, Tjigembong, VIII.1915, B. Corporaal (RMNH); 3 ex., Medan, 3°30' N/98°37' E, 1918, F. C. van Heurn (RMNH); 3 ex., Java, 1921, Madioen, Paroembangan, A. E. Kerkhoven (RMNH); 2 ex., Sumatra, Fort de Kock, 920 m, III.1921, E. Jacobson (BMNH); 1 ex., Java, Pelabokan Patoe, 1923, A. E. Kerkhoven (RMNH); 1 ex., Sipora Island, West Sumatra, 2°13' S/99°40' E, X.1924, C. B. K & N. S (BMNH); 2 ex., Sumatra exp., 1927, Rensch (MNHU); 1 ex., Sunda-Exp., Semongkat Batos-Lanteh-Gbg., N-Hang, 8°36' S/117°212' E, 400 m, 10.I.1927, Rensch (MNHU); 9 ex., Sunda, Exp. Lombok, Narwada, 14.III.1927, Rensch (MNHU); 2 ex., O. Soembawa, Dormpoe, 24.–25.V.1927, Rensch (MNHU); 1 ex., Sunda-Inseln, West Flores, VI.1927, Rensch (MNHU); 3 ex., Sunda, Exp. O. Flores, Geli Moetoe, 14.–20.VII.1927, Rensch (MNHU); 4 ex., Sunda-Ins., W-Flores, Rana Mese, 20.–30.VI.1927, Rensch (MNHU); 1 ex., M. Flores, Rana Mese, 20.–30. XI.1927, Rensch (MNHU); 13 ex., West Lombok, Narmada, 8°34' S/116°11' E, 14.–20.III.1927, Rensch

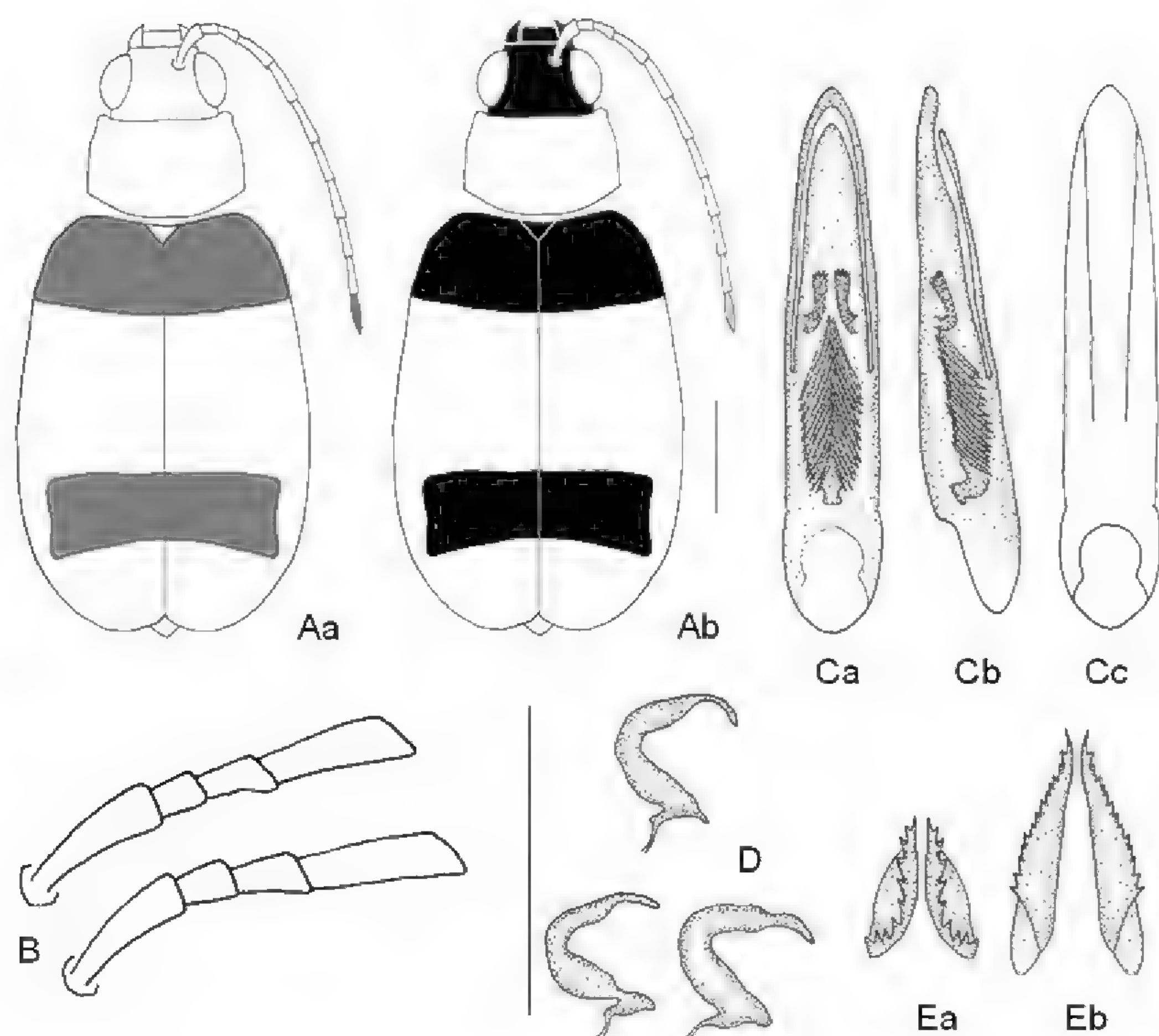


Fig. 5. *Monolepta bifasciata* (Hornstedt, 1788). **A.** Colour patterns. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

(MNHU); 2 ex., Lombok Segare, 8°22' S/116°10' E, 5.VI.27, Rensch (MNHU); 2 ex., Fraserpet, Coorg., F. R. I. Sandal, II.1930, Insect Survey (BMNH); 6 ex., Java, G. Oengaran, 31.IX.1933, P. H. V. Doesburg (RMNH); 2 ex., Ambon Island, 3°40' S/128°10' E, 24.II.1964, A. M. R. Wegner (RMNH); 6 ex., North Sumatra, Alas Valley, Gumpang, 3.77°N /97.5°E, 11.VI.1972, J. Krikken (RMNH); 25 ex., North Sumatra, Toba plateau, Tigadolok, Holzweg Drei, 2°50' N/99°3' E, 20.VI.1972, J. Krikken (RMNH); 1 ex., North Sumatra, Bivouac Two, Mt. Bandahara, 3°44' N/97°43' E, 5.–10.VII.1972, J. Krikken (RMNH); 3 ex., North Sumatra, Alas Valley, Kutatjane, Tanah Merah; Balelutu, 3°31' N/97°47' E, 3.–9.VIII.1972, J. Krikken (RMNH); 7 ex., Java, Semarang, 6°58' S/110°25' E, 1973, P. H. V. Doesburg, E. R. Jacobson (RMNH); 1 ex., Taronggo, 1°45' S/121°40' E, 27.–30.III.1980, M. J. D. Brendell (BMNH); 28 ex., Sulawesi Tengah, Nr. Morowali, Ranu Lakes, 6°14' S/106°49' E, 27.I.–28.IV.1980, M. J. D. Brendell (BMNH); 1 ex., North Central Sulawesi, 1°25' S/121°22' E, V.1980 (BMNH); 1 ex., Indonesia, Sulawesi Utara, Dumoga Bone NP, site 14 1140 m, 7.–8.III.1985, J. D. Holloway (BMNH); 1 ex., N. Sulawesi, Dumoga Bone NP between base camp and Mopuya, 1°50' S/120°31' E, 16.VIII.1985, J. Huijbregts (RMNH); 1 ex., Indonesia, Sumatra Utara, 15 km S. Brastagi, 3°22' N/98°34' E, 21.III.1992, B. Gustafsson et al. (NHRS); 1 ex., Sumatra Utara, Aekpopo alt. 1600 m, 13.III.1995, Maruyama (CTJ); 1 ex., Irian Jaya, Wamena S, 1700 m, 4°12' S/139°01' E, I.1999, A. Weigel (NME); 2 ex., Java (MNHU); 1 ex., Indonesia, Sumatra Utara, Silalahi, 4.V.1999, S. Tsuyuki (CTJ); 14 ex., Sumatra, Riau, Bukit Tigapuluh NP, 0°50' S/102°26' E, I.2000, J. Bezděk (CJB). – **Malaysia.** 11 ex., Borneo, Long Navang, 3°35' N/116°38' E, Mjöberg (NHRS); 1 ex., Malacca, 2°12' N/102°15' E, Coll. Chapuis (IRSN); 3 ex., Perak, 4°48' N/100°48' E, Sharp Coll. (BMNH); 16 ex., Penang, Bowring (BMNH); 1 ex., Nord-Borneo, Coll. Waterstradt (MNHU); 1 ex., Kelantan, 5°06' N/101°53' E, Coll. Veth (RMNH); 9 ex., Malakka, Perak, 2°12' N/102°15' E (MNHU); 1 ex., W. Sarawak, Quop, 1°37' N/110°24' E, III.1914, G. E. Bryant (BMNH); 1 ex., Malaya Peninsula, Barnam R., A. M. Lea & wife (BMNH); 1 ex., Sarawak, Puak, 3°48' N/114°26' E, 3.V.1914, G. E. Bryant (BMNH); 2 ex., Selangor-Pahang, 3°30' N/101°31' E, I.1915 (BMNH); 2 ex., Kuala Lumpur, Maxwell road, 3°08' N/101°41' E, 10.I.1916 (BMNH); 1 ex., Pahang, Kuala Tahan, 4°22' N/102°24' E, XI.1921, F. N. Chasen Coll. (BMNH); 1 ex., Kuantan, 3°49' N/103°19' E, 10.II.1922, G. H. Corbett et al. (BMNH); 1 ex., Pahang, F. M. S. Sungai Tembeling, 4°18' N/102°36' E, XI.1922 (BMNH); 1 ex., Kedah-Perak, 5°52' N/100°31' E, III.1928 (BMNH); 2 ex., Pahang, Bentong, 3°31' N/101°54' E, 22.XII.1931 (BMNH); 1 ex., Perak, F. M. S. Larut Hills, 3700 ft., 5°N/100°53' E, II.1932, H. M. Pendlebury (BMNH); 3 ex., Sarawak, foot

of Mt. Dulit, junction of rivers Tinjar & Lejok, 3°20' N/114°8' E, 9.VIII.1932 (BMNH); 4 ex., Kuala Lumpur, VI.1935, ex. F. M. S. (BMNH); 16 ex., Pahang, F. M. S. Cameron Highland, 500 ft., 4°30' N/101°28' E, VI.–VII.1935, H. M. Pendlebury (BMNH); 1 ex., Pahang nr. Karak, Chintamani, 3°24' N/102°02' E, VIII.1935 (BMNH); 5 ex., Pahang, F. M. S. Fraser Hill, 4200 ft., 3°46' N/101°45' E, VI.1936, H. M. Pendlebury (BMNH); 1 ex., Pahang F. M. S., Pekan, 3°30' N/103°23' E, 25.IV.1939 (BMNH); 1 ex., Kuala Kangsar, 4°46' N/100°56' E, 9.XI.1943 (BMNH); 1 ex., Sarawak, Bario, 3°44' N/115°28' E, 2.XII.1965, Coll. G. H. L. Rotschild (BMNH); 1 ex., Sabah, Mt. Trus Madi, 1800 ft., 5°33' N/116°31' E, 18.–28.VIII.1977 (BMNH); 1 ex., Perak, Bukit Larut, 4°47' N/100°45' E, 9.IX.1986, Salleh & Ismail (UKM); 1 ex., Pahang, Cameron Highland, Tanah Rata, 4°28' N/101°22' E, 25.IX.1986, Ismail & Md. Nor (UKM); 1 ex., Negeri Sembilan, Johol, 2°52' N/102°15' E, 1.III.1987, T. K. Philips (BYUC); 2 ex., Sabah, Keningau area Tenom, alt. m 1230, 5°15' N/116°19' E, 23.XI.1987, Krikken & Rombaut (RMNH); 1 ex., Pahang, T. Bera, 3°19' N/102°27' E, 1.–3.XI.1990, Ruslan (UKM); 1 ex., Perak, Banding, 5°32' N/101°19' E, 29.–30.VII.1991, Ismail et al. (UKM); 3 ex., Sabah, Pulau Banggi, 7°16' N/117°9' E, 8.–12.V.1996, Salleh, Zaidi, Ismail & Sham (UKM); 3 ex., Pahang prov. Kuala Tahan, 4°19' N/102°20' E, 6.–9.XI.1999; 5.–9.III.2007, P. Kocarek et al. (CJB); 4 ex., West Pahang, 35 km see Ipoh, 1500 m, Cameron Highlands, Tanah Rata, 4°30' N/101°28' E, 21.–24.IV.2001, M. Riha (CJB); 1 ex., W. Perak, 1200 m, 25 km, N. E. Ipoh, Banjaran Titiwangsa Mts. Koribu, 4°56' N/101°38' E, 6.–12.V.2001, M. Riha (CJB); 1 ex., Perak, Cameron highlands, 4°22' N/101°20' E, V.2011, Šipek & Vondráček (CJB). – **Papua-New Guinea.** 16 ex., Papua, Kokoda, 8°53' S/147°44' E, IX.1933, 1,200–1,300 ft., L. E. Cheesman (BMNH); 1 ex., Mafulu, 4000 ft., I.1934, L. E. Cheesman (BMNH); 23 ex., Neth., New Guinea Exp. Star Range, 5°00S' /140°50' E, 1260 m, IV.–IX.1959, C. v. Heyningen (RMNH); 1 ex., Madang Dist., 5°14' S/145°48' E, Finisterre Mts., Damanti 3550 ft., 2.–11.X.1964 (BMNH); 2 ex., SW Sokopa, Araban, 200 m, 4°35' S/152°07' E, II.2000, A. Weigel (NME). – **Myanmar.** 9 ex., Burma, Rangoon, 16°48' N/96°0' E, V.10–33, H. L. Andrewes (BMNH). – **Philippines.** 5 ex., N. Luzon, Semper, 17°36' N/118°12' E, Coll. Chapuis (IRSN); 1 ex., Los Banos, 14°10' N/121°13' E, P. I. Baker (NHRS); 7 ex., Philipp., Jacoby Coll. (BMNH); 3 ex., Luzon, Jagor, 16°33' N/121°15' E, 58402 (MNHU); 26 ex., Philippine, 16°33' N/121°15' E, Luzon (MNHU); 1 ex., Mindoro (BMNH); 6 ex., Philippine, Mindanao, 7°51' N/124°51' E (MNHU); 11 ex., Luzon Benguet, La Trinidad, 16°33' N/121°15' E, V.1914, G. Roettcher (MNHU); 1 ex., Philippine Island, 1919 (BYUC); 1 ex., Luzon, Benguet, Kabayan, 16°33' N/121°15' E, 21.XI.1997, L.

F., Mey et al. (MNHU). – **Singapore.** 1 ex., Singapore, 1°21' N/103°49' E, 97–74, H. N. Ridley (BMNH). – **Sri Lanka.** 1 ex., Bogawantalawa, 10°07' N/88°24' E, III–IV.1882 (BMNH); 3 ex., Ceylon, 7°18' N/80°36' E, II.1884, Mus. Columbo (MNHU); 1 ex., Ceylon, Henaratgoda, XII.1889, H. P. Green (BMNH); 1 ex., Puttalam, 8°02' N/79°50' E, 1899, W. Horn (MNHU); 1 ex., Ceylon, Polonnarowa, 7°55' N/81°0' E, 27.II.1906, H. Schoede (MNHU); 4 ex., Ceylon, Diyatalawa; Kandy, 5°15' N/100°29' E, VI.–IX.1908, G. E. Bryant; T. B. F (BMNH). – **Thailand.** 9 ex., Bohol, Semper, 9°50' N/124°10' E, Coll. Chapuis (IRSN); 2 ex., Tringano (BMNH); 5 ex., Japaoeli, A.L.v.H, Coll. Veth (RMNH); 12 ex., Restit. 1885, Coll. Chapuis (IRSN); 1 ex., Wellesley Prov., 1904–105, H. N. Ridley (BMNH); 2 ex., Penin. Siam, Patalung Trang, 7°25' N/99°54' E, 3.V.1924, I. H. N. Evan (BMNH); 1 ex., Getassan, 1100 m, 1973, P. H. V. Doesburg (RMNH); 2 ex., Chumphon Prov., Pha To env., V.1998, Průdek & Šigut (CJB).

Redescription

Total length. 3.70–5.10 mm (mean 4.40 mm; n = 10).

Head. Varied from pale yellow to reddish, brownish or black (Figs 1–5A), some specimens with black vertex and yellow frons (Figs 2b, 4b, 5Ab). Antenna slender, yellow, last antennomere usually brownish. Second and

third antennomere elongated, third slightly longer; ratio length of second to third antennomere 0.75–1.05 (mean 0.89); ratio length of third to fourth antennomere 0.43–0.57 (mean 0.50; Fig. 5B).

Thorax. Pronotum very finely punctuated, yellow to yellowish-red. Pronotal width 1.15–1.65 mm (mean 1.40 mm), ratio length to width 0.61–0.65 (mean 0.63). Scutellum yellow, brownish or black, meso- and metathorax pale yellow to black. Elytron yellow, basal quarter to third including humerus, and corresponding lateral margins in about 80 % of material examined dark brown to black (Figs 1b, 4b, 5Ab), others pale reddish-brown (Figs 3b, 5Aa), rarely black base strongly reduced (Fig. 2b). Elytron furthermore with transverse black to reddish-brown band, usually paler than at elytral base in the apical quarter (Fig. 1b) that does not reach the lateral margin, sometimes reduced to a circular spot, but rarely small (Fig. 2b) or absent (Fig. 3b). Very rarely elytron almost entirely yellow. Elytral length 2.90–4.00 mm (mean 3.45 mm), maximal width of both elytra together 2.00–2.80 mm (mean 2.40 mm), ratio of maximal width of both elytra together to length of elytron 0.68–0.72 (mean 0.70). Legs yellow to pale brownish.

Abdomen. Pale yellow to yellowish-red or brown.

Male genitalia. Median lobe lanceolate, becomes little narrow towards apex (Figs 5C). Tectum long, broad. Me-

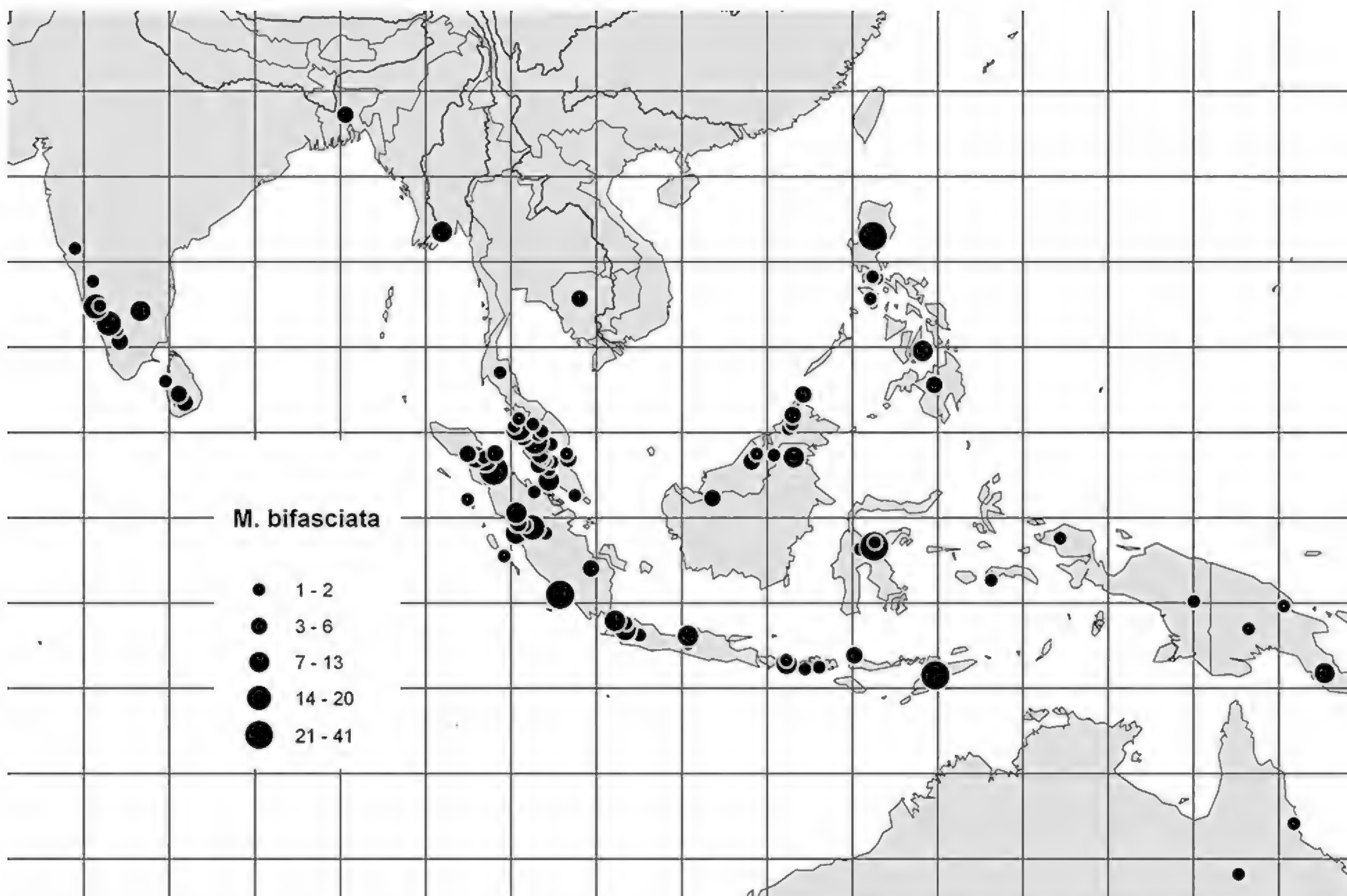


Fig. 6. Distribution of *Monolepta bifasciata* (Hornstedt, 1788).

dian spiculae brush-like of similar size (Figs 5Ca, Cb), lateral spiculae broad, lobe-like with curved base, ventral spiculae absent.

Female genitalia. Nodulus of spermatheca very small, cornu long and median part curved, evenly sclerotised (Fig. 5D). Two strongly different parts of bursa sclerites, dorsal pair with strong spines (Fig. 5Ea), ventral part elongated, with smaller spines at outer margin (Fig. 5Eb).

Diagnosis. In most specimens with characteristic colour pattern, possessing yellow elytra with two transverse reddish to blackish bands, where the subapical one is not reaching the elytral outer margins (can be reduced to spots in some specimens, and rarely completely yellow). Transverse elytral bands also occur in *M. orientalis* and *M. flavofasciata*, but in these bands are much wider or bicolorous (Figs 20, 23), and the apical one is reaching the outer margin. The genitalic characters are most similar to *M. rubra*, *M. rufipennis* and *M. kuninghitam* sp. nov. since all four species lack the ventral spiculae in median lobes (Figs 5C, 8C, 37C, 51C) and the spermathecae (Figs 5D, 8D, 37D, 51D) possess a very small nodulus. In terms of the body size, *M. rubra* (4.50–6.00 mm), and *M. rufipennis* (4.75–6.35 mm) are on average bigger than *M. bifasciata* (3.70–5.10 mm) and *M. kuninghitam* sp. nov. (3.70–4.35 mm), the ratio length to width of pronotum, in *M. bifasciata* and *M. rubra* is almost the same (mean: 0.63 vs 0.64) while in *M. kuninghitam* sp. nov. the pronotum is very narrow (0.71). In the few aberrant coloured specimens, only the genitalia allow a clear allocation to species.

Distribution. One of the most abundant species of *Monolepta* with very wide distribution throughout the Oriental Region, from India, southern China (literature data) up to the Australian Region in New Guinea and even North-East Australia (Fig. 6).

Monolepta rubra (Gyllenhal, 1808)

Figs 7–9

Crioceris rubra Gyllenhal, 1808: 272 (Chevrolat 1836: 407).

= *Luperodes javanensis* Jacoby, 1887: 234 (syn. by Bowditch 1925: 253).

Type material. *Crioceris rubra*. Syntypes: 2 ex. “*Crioceris* 81. 107 / *rubra* Gyllenh. Synon. Inf. 34 / Ind. Or. [?] Lund.” and another ex with “Java Mellenb.” (NHRS).

Luperodes javanensis. Lectotype: “Batavia / *Luperodes javanensis* Jac. Type / Type 18105 / Sythoff, Batavia, Java” (RMNH). Paralectotype: 1 ex. same data as lectotype (MCZH; Fig. 7). Type locality: 6°10' S/106°51' E. Jacoby mentioned “two specimens” from one location in his original publication. Both are available, and we designate a lectotype here to fix the name on a single specimen.

Further material examined. – **Indonesia.** 2 ex., Nierst, Depok, 6°23' S/106°48' E, 1899, Coll. Veth (RMNH);



Fig. 7. Type material of *Monolepta rubra* (Gyllenhal, 1808). – *Luperodes javanensis* Jacoby, 1887, paralectotype (MCZH).

33 ex., Java, Proepoek Tegal, 6°52' S/109°08' E, IX.1909, Valck Lucassen (RMNH); 4 ex., Java, Slawi Tegal, 6°59' S/109°08' E, IX.1909, Valck Lucassen (RMNH); 3 ex., Soemba Northcoast, 9°41' S/119°58' E, IV.1930, W. C. van Heurn (RMNH); 5 ex., Java, Semarang, 6°58' S/110°25' E, E. R. Jacobson (RMNH); 1 ex., Bandung, 6°54' S/107°36' E, Coll. Veth (RMNH); 2 ex., West Java, Krawang ds Randas-dengklok, 6°18' S/107°17' E, 2.XI.1951, L.V.L (RMNH). – **Malaysia.** 1 ex., Sarawak (BMNH); 2 ex., Borneo, German Mission, 56358, Martin Schmidt (MNHU).

Redescription

Total length. 4.50–6.00 mm (mean 5.31 mm; n = 10).

Head. Entirely reddish-brown to blackish brown. Antenna slender, pale yellowish-brown, terminal antennomere usually dark-brown (Fig. 8A). Third antennomere slightly longer than second; ratio length of second to third

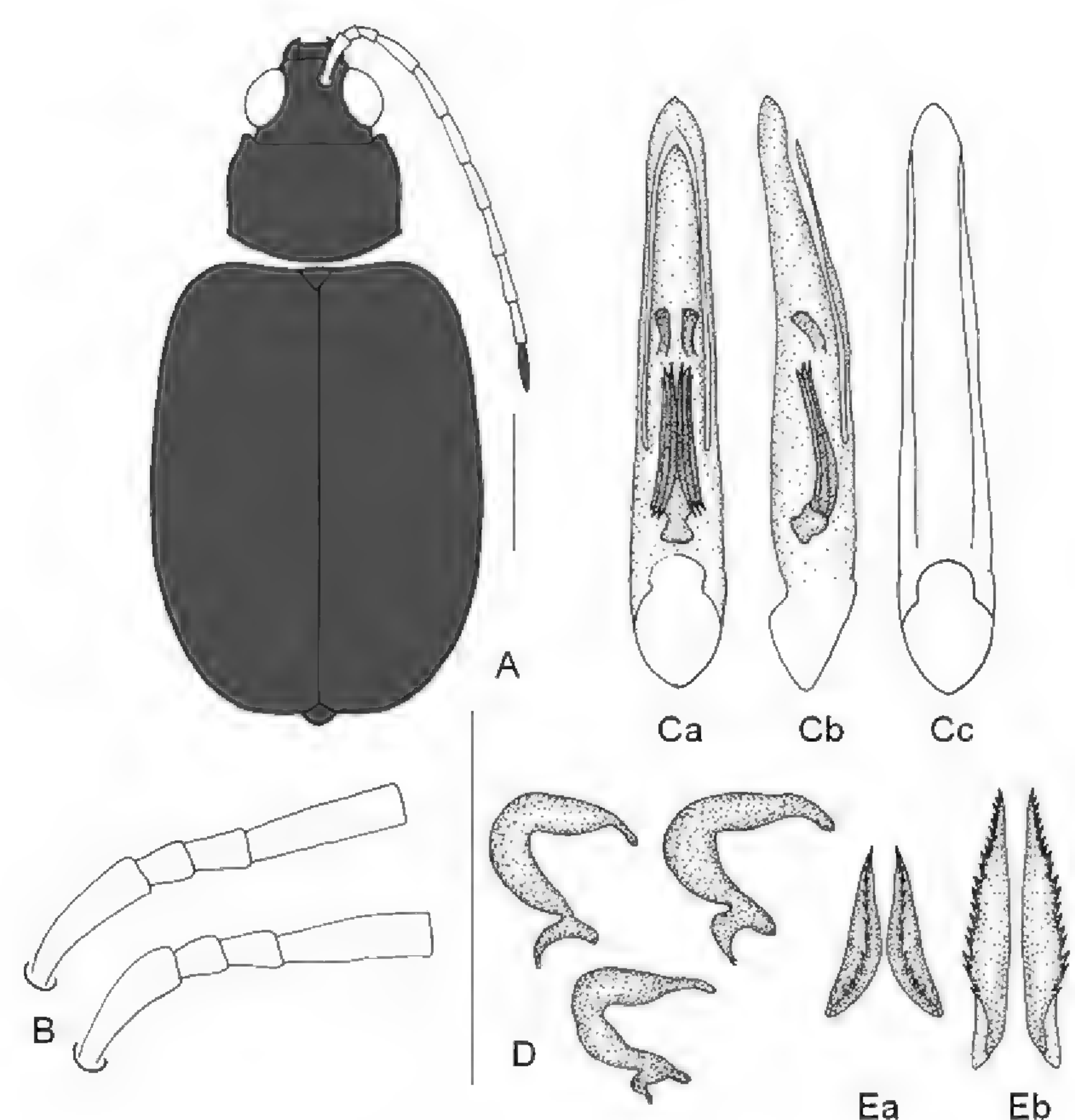


Fig. 8. *Monolepta rubra* (Gyllenhal, 1808). **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

antennomere 0.75–1.00 (mean 0.83); ratio length of third to fourth antennomere 0.38–0.56 (mean 0.42; Fig. 8B).

Thorax. Pronotum finely punctuated, entirely reddish-brown to dark-brown, surface strongly convex. Pronotal width 1.40–1.75 mm (mean 1.58 mm), ratio length to width 0.63–0.65 (mean 0.64). Scutellum, meso- and metathorax dark brown. Elytron uniformly reddish to dark brown, rarely more yellowish, sometimes with fine darker outer margins (Fig. 7b). Elytral length 3.65–4.30 mm (mean 3.94 mm), maximal width of both elytra together 2.50–3.00 mm (mean 2.77 mm), ratio of maximal width of both elytra together to length of elytron 0.68–0.72 (mean 0.70). Legs fulvous.

Abdomen. Dark brown.

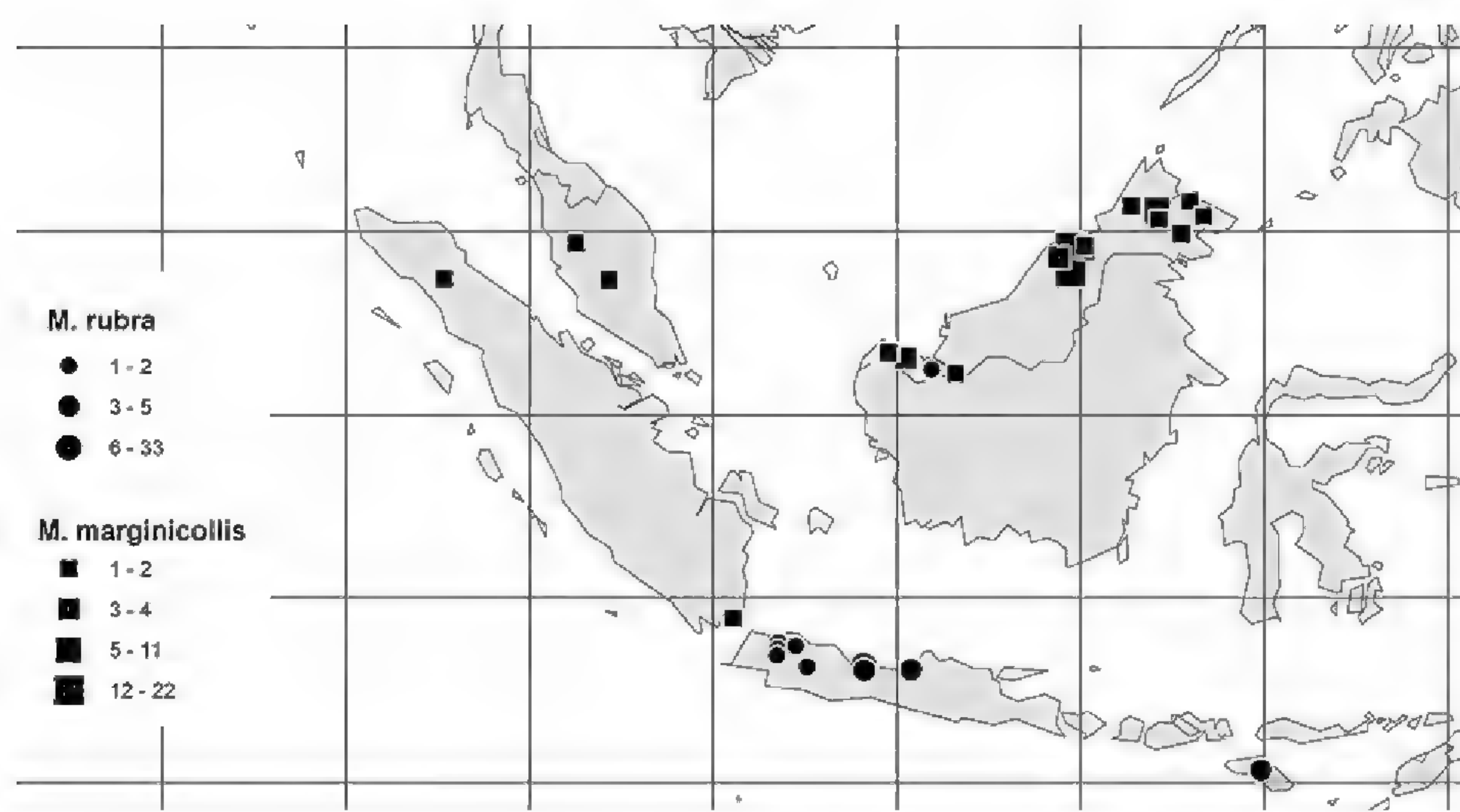


Fig. 9. Distribution of *Monolepta rubra* (Gyllenhal, 1808) and *Monolepta marginicollis*, Jacoby, 1896.

Male genitalia. Median lobe lanceolate, slender, becomes slightly narrow towards apex. Tectum pointed. Few long and slender median spiculae, lateral spiculae club-shaped, lobe-like at apex, (Figs 8Ca, Cb), ventral spiculae weakly sclerotized and hardly visible.

Female genitalia. Spermatheca with very small nodulus, middle part and cornu long, curved (Fig. 8D), two pairs of bursa sclerites with strong spines (Fig. 8E).

Diagnosis. *Monolepta rubra* is characterized by an entirely brownish-red to dark brown colouration. *Monolepta rufipennis* and *M. sulawensis* sp. nov. are most similar in colouration (Figs 37A, 60A). Total length of *M. rubra* (4.50–6.00 mm) is similar to *M. rufipennis*, while *M. sulawensis* sp. nov. is much smaller (3.70–4.25 mm), the pronotum of *M. rubra* is less broad (0.64–0.68) than in the other two species (0.60–0.64). *M. rufipennis* can be distinguished also by the contrast between black head and pronotum to the reddish elytra. Median lobe is slender and lacks the ventral spiculae in *M. rubra* and *M. rufipennis*, and both species are surely closely related, but the outer shape of the median lobe is much more slender in *M. rubra* (Figs 8Ca, 37Ca).

Distribution. Known from Java and adjacent islands (Fig. 9), and Borneo.

Monolepta signata (Olivier, 1808)

Figs 10–15

Galeruca signata Olivier, 1808: 665 (Jacoby 1889: 229).

= *Crioceris neglecta* Sahlberg, 1823: 72; repated in 1829: 29 (syn. by Maulik 1936: 410).

= *Luperodes hieroglyphicus* Motschulsky, 1858: 104 (syn. by Wagner & Bieneck 2012: 210).

= *Luperodes quadripustulatus* Motschulsky, 1858: 105 (syn. by Maulik 1936: 410).

= *Monolepta elegantula* Boheman, 1859: 183 (syn. by Weise 1913: 229).

= *Luperodes dorsalis* Motschulsky, 1866: 415 (syn. by Wagner & Bieneck 2012: 210).

= *Luperodes quadriguttata* Fairmaire, 1887: 333 (syn. by Weise 1924: 169).

= *Monolepta picturata* Jacoby, 1896: 292; syn. nov.

= *Monolepta simplex* Weise, 1913: 229 (syn. by Weise 1924: 168).

Type material. *Galeruca signata*. Type material is not available to us.

Crioceris neglecta. Syntype: "Ind. Or. / neglecta Sahlberg n.sp. guttata Gyll." At least on syntype is available in NHRS.

Luperodes hieroglyphicus. Lectotype: ♂, "Luperodes hieroglyphicus Motsch., Ind. Or" (ZISP; Fig. 10). Paralectotypes, 5 ex. same data as lectotype (ZISP). All six syntypes were originally glued tightly together on one card. The lectotype and one female paralectotype have been remounted, the other four paralectotypes are left on the original card (Wagner & Bieneck 2012: 210).

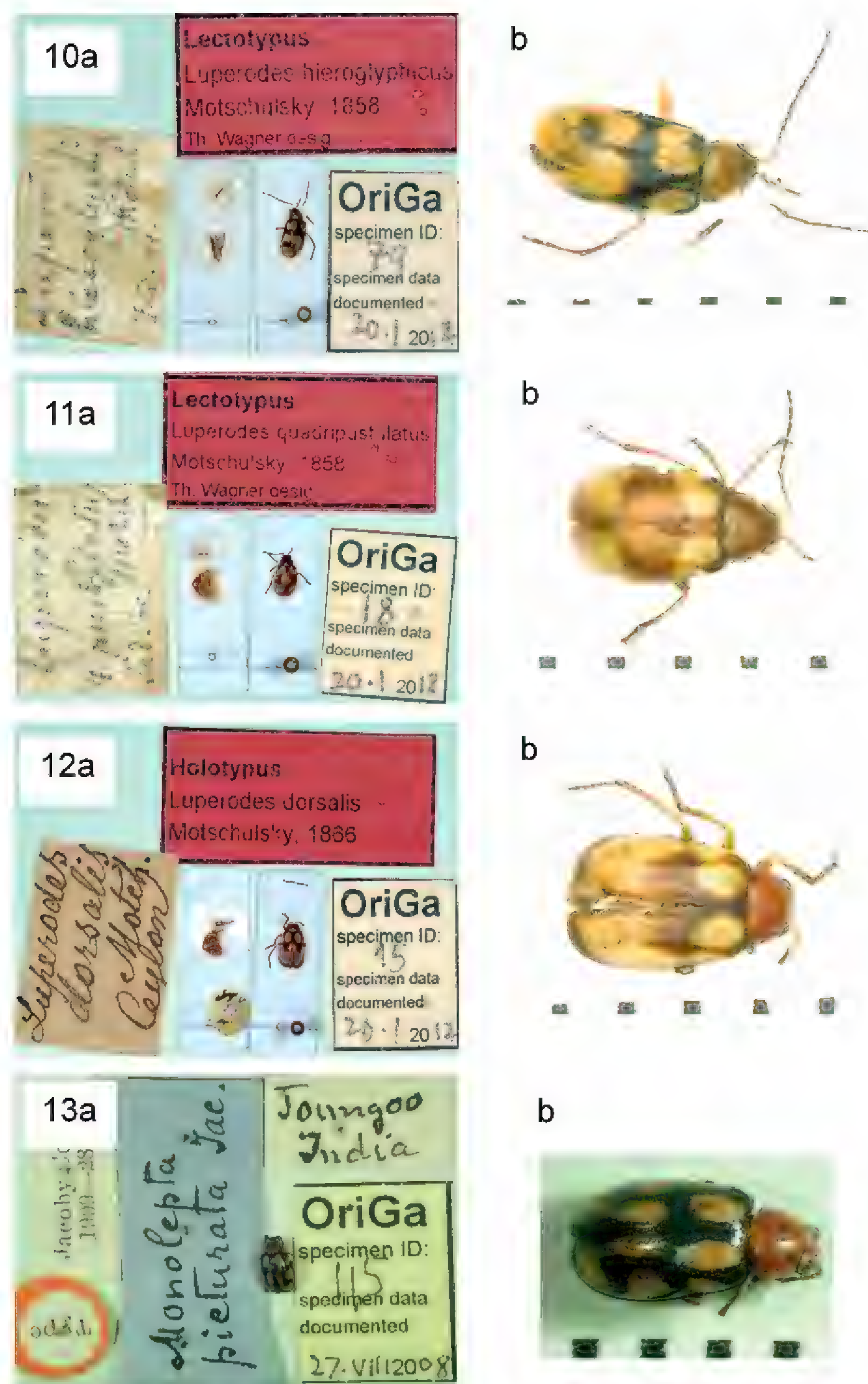
Luperodes quadripustulatus. Lectotype: ♂, "Luperodes 4pustulatus Motsch., Ind. Or" (ZISP; Fig. 11). Paralectotypes, 2 ex. same data as lectotype (ZISP). These two paralectotypes have been originally glued together with the choosen lectotype on the original card (Wagner & Bieneck 2012: 210). A further type, not stated as paralectotype in Wagner & Bieneck (2012) is in NHRS.

Monolepta elegantula. Syntype: "Malacca / Kinb. / type / elegantula Bhm." At least on syntype is available in NHRS. There is one specimen labelled "Co-type" in BMNH, invalid type from Nias Island near Sumatra, while the species is only described from "Malacca".

Luperodes dorsalis. Holotype: ♂, "Luperodes dosalis Motsch. Ceylon" (ZISP; Fig. 12) (Wagner & Bieneck 2012: 210).

Luperodes quadriguttata. Type material is not available to us. We adopt Weise's (1924) statement that this species is a junior synonym of *M. signata* (Olivier, 1808).

Monolepta picturata. Lectotype: "M. picturata Jacoby 1896 / Type / Toungoo India / Monolepta picturata Jac. / Jacoby Coll. 1909-28a" (BMNH; Fig. 13). – Paralectotype: 1 ex., same data as lectotype (BMNH). Type locality: 18°56' N/96°25' E. Jacoby gave no details on specimen number and there are two specimens in his collection in BMNH available. We herein designate a lectotype here



Figs 10–13. Type material of *Monolepta signata* (Olivier, 1808). **10.** *Luperodes hieroglyphicus* Motschulsky, 1858, lectotype, ♂ (ZISP). **11.** *Luperodes quadripustulatus* Motschulsky, 1858, lectotype, ♂ (ZISP). **12.** *Luperodes dorsalis* Motschulsky, 1866, holotype, ♂ (ZISP). **13.** *Monolepta picturata* Jacoby, 1896, lectotype (BMNH).

to fix the name on a single specimen. Jacoby was aware about the similarity to *M. signata* "A plainly marked species, resembling somewhat in colouration *M. signata* Oliv., but easily distinguished by the number, position and shape of the elytral pale spots". To that time, colouration was an important diagnostic character.

Monolepta simplex. Syntype: 1 ex. "P. Princessa Palawan Baker / simplex m." (NHRS).

Further materials examined. – **Bangladesh.** 1 ex., Dacca, 23°42' N/90°22' E, 7.IX.1945, D. Leston, B.M. 1945-86 (BMNH). – **Cambodia.** 1 ex., Peal-Leap, 11°42' N/103°02' E, V.1950 (BMNH). – **China.** 3 ex., China (BMNH); 2 ex., Fukien (MNHU); 3 ex., Chusan Is., 30°10' N/122°24' E, J. J. Walker (BMNH); 4 ex., Kanton, 23.4°N/113.5°E, 1.–30.X.1916, H. Weigold (MNHU); 1 ex., Yunnan, 25°02' N/102°42' E, 1. VIII.1922, Prof J. W. Gregory (BMNH); 2 ex., SW. China, Yunnan, 4.VIII.1922, Prof. J.W. Gregory (BMNH); 2 ex., Anoy, 35°51' N/104°11' E, 1923, S. F. Light

(BMNH); 3 ex., China-Yunnan, Lijian env., 25°02' N/102°42' E, 10.VIII.1995, J. Scheider (CJB); 10 ex., Yunnan, Menghai, 21°58' N/100°28' E, 6.–10. III.1999, River, P. Grootaert (IRSN). – **Hong Kong.** 5 ex., Hong Kong, 22°22' N/113°56' E, Walker Coll. (BMNH); 1 ex., Hong Kong, 22°23' N/114°6' E, Stimpson (RMNH); 2 ex., Hong Kong, Tai Lung Farm, IX.–XI.1965, I. W. B. Thornton (BMNH); 1 ex., Hong Kong, 22°23' N/114°6' E (BMNH). – **India.** 32 ex., C. Almora, Ranikhet, Kumaon, W. Almora, 29°35' N/79°39' E, 5.–8.16, H. G. C. (BMNH); 14 ex., U. Gumti Val., W. Almora Dn. 29°35' N/79°39' E, VIII.1917, IV.1919, H. G. C. Champion Coll. (BMNH); 9 ex., Assam, Sudiya, Doherty, 27°50' N/95°40' E, Fry Coll. (BMNH); 4 ex., Assam, Patkai Mt., 21°05' N/91°13' E, Doherty (BMNH); 2 ex., Malabar, 10°15' N/75°14' E, Doherty, Fry Coll. (BMNH); 14 ex., India, Baly Coll. (BMNH); 1 ex., Nilgiri Hills, 11°25' N/76°30' E, T. V. Champbell (BMNH); 6 ex., Haldwani Div., Kumaon, 29°13' N/79°31' E, H. G. C. (BMNH); 2 ex., Dahra Dun, 30°18' N/78°2' E (BMNH); 14 ex., Nilgiri Hills, 11.35°N/76.42°E, H. E. Andrewes (BMNH); 2 ex., Sikkim, Gopaldhara, Rungbong Vall., H. Steven (BMNH); 2 ex., Travancore, Wallardi, 37°N/144.89°E, Collection J. Achard (BMNH); 1 ex., Taplejung District, Sengu 27°21' N/87°40' E, c 6200' (BMNH); 1 ex., Assam, 26°12' N/92°56' E, Doherty (BMNH); 1 ex., Deli, 3°35' N/98°39' E, S. V. L (RMNH); 1 ex., Punjab, Kangra Vall., 1903-37 (BMNH); 1 ex., Himalaya, Chaubattia, Almora District, 6-7000 ft., 1920, 29°35' N/79°39' E, S. R. Archer (BMNH); 3 ex., Belgaum, 15°50' N/74°34' E, Andrewes Bequest, B.M. 1922-221 (BMNH); 1 ex., Punjab, Simla, 31°6' N/77°10' E, E. C. Anson (BMNH); 7 ex., Bengal, Sarda, F.W.C. (BMNH); 3 ex., Bengal, Mandar, 21°41' N/87°33' E, VII.1891, P. Cardon, Coll. Duvivier (IRSN); 1 ex., Bhowali, Nr. Naini Tal, 4500 ft., 29°22' N/79°31' E, 21.X.1934 (BMNH); 4 ex., Assam, Mishmi Hills, Delai Valley, Taphlogam, 28°14' N/95°59' E, 7.XI.1936 (BMNH); 4 ex., Coimbatore, 11°1' N/76°58' E, VII.1950, P. Susai Nathan (IRSN); 13 ex., Nilgiri Hills, Cheranogode, 3500 ft., 11°25' N/76°30' E, X.1950, P. Susai Nathan (IRSN); 21 ex., Annamalai Hills Cinchona, 10°02' N/77°07' E, 3500ft, V.1952, IV.1964, V.1968, P. Susai Nathan (RMNH); 45 ex., S. Coorg Ammanit, 3100 ft, 12°25' N/75°44' E, XI.1950–II.1952, P. Susai Nathan (IRSN); 24 ex., Kodaikanal Pulney Hills, 6500 ft, 10°12' N/77°30' E, V.1953, P. S. Nathan (IRSN); 1 ex., Bengal, 21°56' N/88°51' E, Sunderbans, F.W.C., H.G. Champion Coll. B.M. 1953-156 (BMNH); 2 ex., Arunachal Pr. 8 km S Jamiri, Sessa vicinity, 28°14' N/94°4' E, 26.V.–4.VI.2005, L. Dembicky (BMNH). – **Indonesia.** 1 ex., Java, Tengger, 6°58' S/111°17' E, 4000, Coll. Duvivier (IRSN); 1 ex., Sumatra, Mjoberg, Kota Tajne (NHRS); 5 ex., Sumatra, Mjoberg, Brastagi, 1°17' S/102°40' E (NHRS); 6 ex., Sumatra, Mjoberg, Medan, 3°35' N/98°E (NHRS); 2 ex., Sumatra, Mjoberg,

Tjinta Radja (NHRS); 1 ex., Sumatra, Mjoberg, Perdagangan (NHRS); 1 ex., Java, 7°36' S/110°42' E (NHRS); 5 ex., Java, K.R.H. (RMNH); 1 ex., W. Java (RMNH); 4 ex., Java, Batavia, 6°12' S/106°50' E, Sythoff (RMNH); 2 ex., Bandar Baroe, Sumatra, 5°15' N/96°04' E, J.J.d.V (RMNH); 1 ex., Java, Preange, Tjigembong, 6°42' S/110°56' E, J. B. Corporaal (RMNH); 15 ex., N.O. Sumatra, Tandjong Morawa Serdang, 0°35' S/101°18' E, Dr. B. Hadgen (RMNH); 40 ex., Nias, 1°07' N/97°31' E, J. D. Pasteur (RMNH); 1 ex., Java, Kraksakun (RMNH); 14 ex., Java, Ardja-Sari, Preanger, 7°03' S/107°38' E, P. F. Sitjhorf (RMNH); 1 ex., Java, G. Oengaran, 7°11' S/110°20' E, v. Doesberg (RMNH); 1 ex., Kediri, 7°49' S/112°0' E, Java de Vos (RMNH); 1 ex., Java, Ameyer (RMNH); 1 ex., Sumatra, Brastagi, 3°22' N/98°34' E, Mjoberg (NHRS); 1 ex., Java Orient, Montes Tengger, 4000 ft, 1890, H. Fruhstrofer (RMNH); 1 ex., Sumatra, Siboga, 1°44' N/98°46' E, X.1890–III.1891, E. Modiglianii (BMNH); 3 ex., Sumatra, Pagherang Pisang, X.1890–III.1891, E. Modiglianii (BMNH); 31 ex., Sumatra, Manna, 4°30' S/102°58' E, 1902, M. Knappert; Museum Leiden, ex. Collection J.J. de Vos tot Nederveen Cappel (RMNH); 1 ex., Sumatra, Nias, 1°07' N/97°31' E, Fry Coll. (BMNH); 11 ex., Nias Island, Schreiber, 1°07' N/97°31' E, Sharp Coll. (BMNH); 1 ex., Slawi Tegal, Java, 6°59' S/109°08' E, 1909, Valck Lucasen (RMNH); 1 ex., Sumatra, Soekaranda, Dohrn, Jacoby Coll. (BMNH); 3 ex., Java, Nongkodjadjar, 7°38' S/112°54' E, Jan. 1911, E. Jacobson (RMNH); 1 ex., Java, Mount Salak, 7°46' S/112°56' E, 400 m, 1921, L. G. E. Kalshoven (IRSN); 3 ex., Java, Kerkhoven, 1921, Panoembang, ardayasari (RMNH); 1 ex., Java, 24.XII.1925 (IRSN); 1 ex., Central Java, 7°09' S/110°08' E, 4.III.1927,

2093 m, Rensch (MNHU); 3 ex., C. Java, Kedae Pagar, Saemang, 800 m, 2.III.1932, D. V. L. (RMNH); 1 ex., Java, Lembang, 6°49' S/107°37' E, V.1933, v. Doesburg (RMNH); 1 ex., Tangk-Praho, 6.VI.1933, P. H. V. Doesburg (RMNH); 1 ex., Java, G. Kawi, 7°55' S/112°27' E, VII.1934, v. Doesberg (RMNH); 1 ex., Breml, Probulingga, 7°58' S/113°29' E, 1000 m, XI.1934, W. C. v. Heuton, ex. Collection, S. J. van Ooststroom, rec. 1982 (RMNH); 1 ex., 23.VII.1938, H. M. Pendlebury (BMNH); 1 ex., G. Gede, Pontiek, 6°46' S/106°56' E 1485 m, 2.V.1948, Dr. L. Kalshoven (RMNH); 6 ex., W. Java, Tjibadas, 7.19°N/107.36°E, V.1950, v. Ooststroom, S. J. van Ooststroom, rec. 1982 (RMNH); 2 ex., West Java, Puntjak, 6°39' S/106°56' E, 1400 m, 27.IX.1953, J. v. der Vocht (RMNH); 1 ex., N. Sumatra, Susuk, 3°09' N/98°21' E, 29.V.1994, Muruyama (CTJ); 1 ex., Java Central, Bandar, 7°09' S/110°08' E, 550 m, at light, 20.I.1998, R. Cervenka (CJB); 1 ex., N. Sumatra, Silalahi alt. 1600 m, nr D. Toba, 2°19' N/98°43' E, 2.V.1998, Muruyama (CTJ). – **Malaysia.** 4 ex., Malacca, 2°19' N/102°20' E, Coll. Duvivier, Coll. Chapuis (IRSN); 1 ex., Kuala Lumpur, 3°08' N/101°41' E (BMNH); 1 ex., Bengal Occ. Betana, 1890, Coll. Duvivier (IRSN); 1 ex., Sarawak, Bidi, 2°33' N/113°01' E, 28.I.1909, C. J. Brooks (BMNH); 1 ex., Malay Penin., Selangor F. M. S., Gombak Valley, 3°17' N/101°38' E, 17.X.1921, H. M. Pendlebury (BMNH); 2 ex., Pahang, F. M. S. Kuala Tahan, 4°22' N/102°24' E, 19.XI.1922, H. M. Pendlebury (BMNH); 1 ex., South China Sea, Pulau Tioman, Sedagong, 900' , 2°47' N/104°10' E, V.1927, N. Smedly (BMNH); 1 ex., Malay Penin., Kedah Perak, 5°53' N/100°31' E, 23.III.1928 (BMNH); 1 ex., Perak, F. M. S. Larut Hills, 4500 ft., 4°47' N/100°45' E, 20.II.1932, H. M. Pendlebury (BMNH); 1 ex., Malay Penin., Pahang, Fraser's Hill, 3°46' N/101°45' E, 25.X.1933, Pine trees (BMNH); 3 ex., Pahang, F. M. S. Cameron Highlands, 4800 ft., 4°29' N/101°23' E, 22.VI.1935 (BMNH); 1 ex., Tapah, 4°12' N/101°15' E, 27.II.1974, Y. Kiyoyama (BMNH); 1 ex., Cameron Highlands, 4°29' N/101°23' E, 6.I.1982 (BMNH); 1 ex., Pulau Tioman, 2°47' N/104°10' E, Tekek, 24.III.1987, T. E. Leiler (NHRS); 1 ex., N. Borneo Exp., Sabah, Interior zone, 5.1°N/115.59°E, 16 km of Tenom Agric. Res. Station along Sg. Pegalan, 5.1°N/115.59°E, 200, 23.XI.1987, J. Huisman & R. de Jong (RMNH); 1 ex., Malaysia, Fraser Hill, 3°46' N/101°45' E, 21.II.1991, RM exped. (NHRS); 2 ex., Perak, Banding, 4°47' N/101°11' E, 2.XI.1991, Ismail et al. (UKM); 1 ex., Kedah, Langkawi, Lubuk Semilang, 6°21' N/99°47' E, 8.–10.XII.1992, Zabidi et al. (UKM); 3 ex., Perak, Pangkalan Hulu, 5°42' N/100°59' E, XI.1991–II.1993, Ismail et al. (UKM); Pahang, Tasik Bera, Pos Iskandar, 3°07' N/102°36' E, 4.–8.V.1993, Sham et al. (UKM); 1 ex., Pahang, Pulau Tioman, 2°47' N/104°10' E, 18.–21.IX.1999, Ismail & Sham (UKM); 1 ex., W-Perak, Bamjangan Titi Wangsa Mts., 5°58' N/101°20' E, 1200 m, V.2001, P. Cechovsky

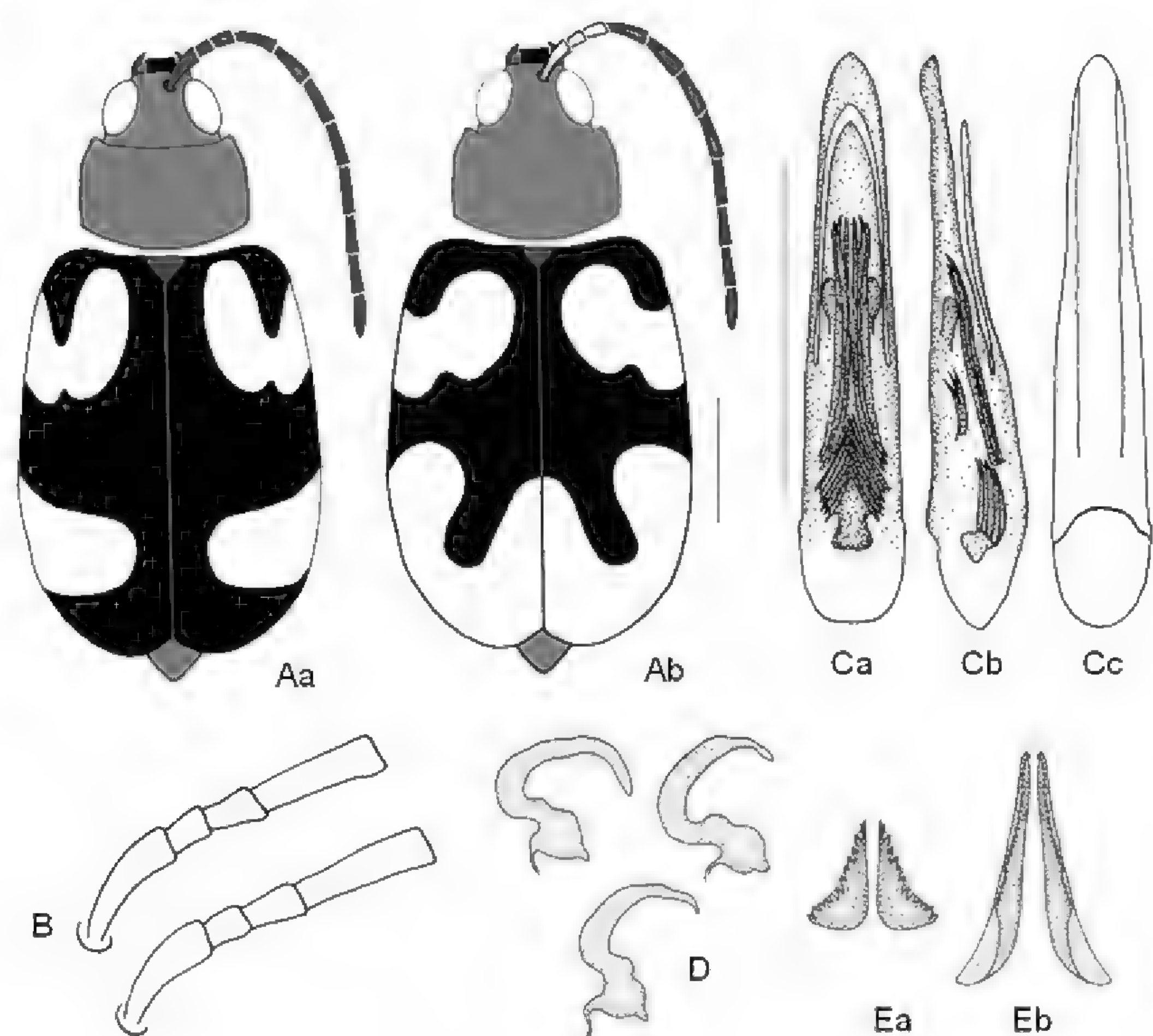


Fig. 14. *Monolepta signata* (Olivier, 1808). **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

(NME); 19 ex., W-Kelantan, Gunung Basor, 5°30' N/101°45' E, 1700 m, V.2016, P. Cechovsky (NME). – **Myanmar.** 3 ex., Tenasserim, Javoy, Fry Coll. (BMNH); 1 ex., U. Burma, Kyauktau, 20°51' N/92°58' E, Sehwebo Dn. HGC (BMNH); 1 ex., Birmania, Shwego Myo, X.1885, Fea (IRSN); 1 ex., Carin, Cheba, 19°13' N/96°35' E, I.1888, I. Fea (IRSN); 1 ex., Tharrawaddy, Burma, 17°39' N/95°48' E, 1902.294 (BMNH); 1 ex., Burma, Toungoo, 18°56' N/96°25' E, 1902.294 (BMNH); 1 ex., Burmah, 21°54' N/95°57' E, Andrewes Bequest (BMNH); 1 ex., Upper Burma, Se- ingkhu Valley, 28.5°N/97.35°E, 1926, P. Kingdon Ward (BMNH); 1 ex., Upper Burma, Mali Kha Valley, 1926, P. Kingdon Ward (BMNH); 4 ex., Tenasserim, Malvedaung, 30 m S. of YE, 15.–25.XI.1934 (BMNH); 6 ex., Burma, Mishmi Hills, 28°14' N/95°59' E, 1935, M. Steele (BMNH); 1 ex., Upper Burma, Hkamti Long, IV.–V.1935 (BMNH); 6 ex., Upper Burma, Nam Tai Valley, 27°42' N/97°54' E, 2.VIII.1938, R. Kaulback (BMNH). – **Nepal.** 1 ex., British-Nepal Exped., 1950 (BMNH); 1 ex., West Nepal, Silgarhi-Doti, Kali Gad, 29°16' N/80°59' E, 26.VII.1953, J. B. Tyson (BMNH); 1 ex., Rimi, 29°07' N/82°34' E, 1000 ft., 28.IX.1952 (BMNH); 1 ex., Pokhara, 3000 ft., 28°15' N/83°58' E, 12.IV.1954, J. Quinlan (BMNH); 1 ex., Pokhara, Basunghara Parc, 800 m, 28°12' N/83°50' E, IX.2014, F. Creutzberg (NME). – **Philippines.** 1 ex., Palawan, P. Princess, 9°26' N/118°22' E, Baker (NHRS); 4 ex., Luzon, 16° N/121° E, 38765 (MNHU). – **Singapore.** 4 ex., Singapore, 1°21' N/103°49' E, C.J. Saunders (BMNH). – **Sri Lanka.** 3 ex., Ceylon (MNHU), 4 ex., Colombo on Coast level, 6°56' N/79°50' E, 7.–27.IV.1882, G. Lewis (BMNH); 1 ex., Kandy, 7°17' N/80°38' E, 1546–1727 ft., 17.–23.II.1882, G. Lewis (BMNH); 1 ex., Halupahani, Haldummulle, 6.76°N/80.88°E, 1904 (BMNH); 3 ex., Ceylon, T. B. Fletcher, 1909 (BMNH); 3 ex., Ceylon, A. Rutherford, 1914, T. B. Fletcher (BMNH); 4 ex., Hambantona, 6°07' N/81°07' E, IX.1890, H. P. Green (BMNH); 1 ex., Ceylon, Kalawewa, 8°01' N/80°33' E, 14.II.1953 (BMNH); 1 ex., Dickoya 20 km WSW, Nuwara Eliya, 6°52' N/80°36' E, 28.III.1973, G. Benick (MNHU); 2 ex., Sri Lanka NWP Kur. D Pannala, 2. II.1974, P. I. Perrson (NHRS); 1 ex., Kitulgalle, 6°59' N/80°25' E, 1700 ft., 17.–20.I.1982 (BMNH); 1 ex., S. Sri Lanka near Tissamaharama, 90 km near NE of Matara, 6°17' N/81°17' E, 14.III.1994, Z. Kajval (CJB). – **Thailand.** 4 ex., Siam, Renong, Doherty (BMNH); 1 ex., C. Siam, 150 m, Kwae Nov River. Exp. Niki, 14°19' N/98°57' E, 23.IV.–5.V.1946, J. K. Jonkers (RMNH); 2 ex., Thailand, 25 km NM v. Lan-Sak, 15°27' N/99°34' E, IX.1990 (MNHU); 2 ex., N. Thailand, Mae Hong San env. Ban Huai Po, 18°44' N/97°52' E, 1700 m, 24.–30.VI.1993, J. Schneider (CJB); 3 ex., Loei Chiang Khan, 17°50' N/101°45' E, 11.II.1999, P. Grootaert (IRSN); 2 ex., Pattaya, 12°53' N/100°53' E, III.2016, R. Mazrozi (NME). – **Vietnam.** 5 ex., Coll. Duvivier;

Coll. Chapuis (IRSN); 5 ex., Barway, Cardon, Coll. Duvivier (IRSN); 2 ex., Berhampur (BMNH); 1 ex., Dalaen-saen nr Nong-po, Walker Coll. 93-18 (BMNH); 1 ex., Jad. Bov, Coll. Veth (RMNH); 1 ex., Annam, Phuc-Son, Nov–Dez, H. Fruhstorfer (RMNH); 2 ex., Central Tonkin Chiern-Hoa, Aug. Sept., H. Frühstorfer (RMNH); 2 ex., Haut-Tonkin, Madon, Riviere Claire, 19°45' N/107°45' E (IRSN); 1 ex., Tonkin, 19°45' N/107°45' E, Coll. Mandon (IRSN); 2 ex., Hanoi, 21°1' N/105°51' E (IRSN); 1 ex., Saigonh (IRSN);); 4 ex., Soereol, 7.1878 (RMNH); 6 ex., Hanoi, 1903, Coll. Veth (RMNH); 8 ex., Tonkin, Hoa Binh, Hanoi, II.–VI.1917; VIII.1918, R. V. de Slavaza (BMNH); 1 ex., Tonkin, Bao Ha, X.–XII.1923, H. Stevens (BMNH); 3 ex., Tonkin, Thai-Nien Basin of Fleuve Rouge, 1924, H. Stevens (BMNH); 1 ex., Vietnam, Prov. Lao-Cai, 22°20' N/104°E, 1900 m, 26.IX.1963, Mai (MNHU); 1 ex., Vietnam N., Huong Son Prov. Ha Son Bin, 21°27' N/105°59' E, 26.–29.IV.1991, J. Strand (CJB); 2 ex., Cao Bang Prov., Pia Oac NR, 22°38' N/105°53' E, V.2014, A. Weigel (NME).

Redescription

Total length. 3.50–5.25 mm (mean 4.47 mm; n = 10).

Head. Very finely punctuated, pale brown, reddish-brown or red. Labrum dark brown and mandible partly black. Antenna slender and extending to the middle of the elytra, dark brown to black (Fig. 14Aa), usually only three basal antennomeres pale yellow or reddish (Figs 10b–13b, 14Ab). Second antennomere usually shorter than third; ratio length of second to third antennomere 0.67–1.00 (mean 0.77); ratio length of third to fourth antennomere 0.38–0.50 (mean 0.45; Fig. 14B).

Thorax. Pronotum finely punctuated, pale yellow to brown-reddish. Pronotal width 1.15–1.55 mm (mean 1.35 mm), ratio length to width: 0.60–0.63 (mean 0.61). Scutellum brown to black, meso- and metathorax black. Elytron brown to black, varied on number of yellow spots, from usually one beyond humerus up to three. Elytral length 2.90–3.60 mm (mean 3.32 mm), maximal width of both elytra together 2.00–2.80 mm (mean 2.40 mm), ratio of maximal width of both elytra together to length of elytron 0.72–0.75 (mean 0.73). Coxae pale yellow to brown, base of femur yellow, outer parts black, also apical part of tibiae and all tarsi brown to black (Figs 10b–13b).

Abdomen. Pale yellow to brown.

Male genitalia. Median lobe parallel-sided, becomes narrow towards apex. Median spiculae consist of a group of long and slender structures, apical median spiculae slightly curved. Lateral spiculae c-shaped, Ventral spiculae not visible from dorsal view, short, slightly curved and slender (Fig. 14Cb).

Female genitalia. Spermatheca with spherical nodulus, cornu long and curved (Fig. 14D). Dorsal part of

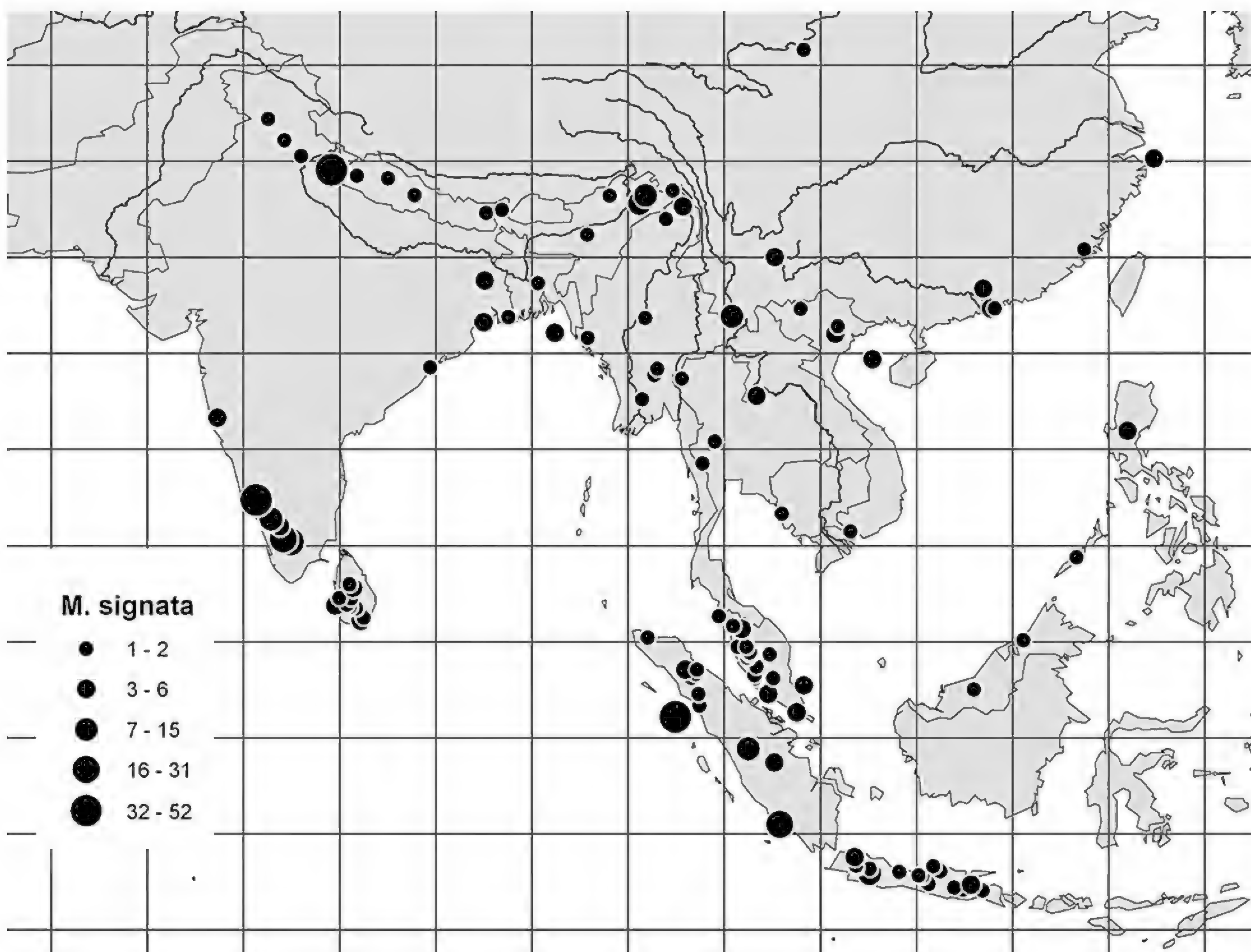


Fig. 15. Distribution of *Monolepta signata* (Olivier, 1808).

bursa sclerite with saw-like spines, ventral part longer, slender, with fine spines (Fig. 14E).

Diagnosis. This species shows a high variety in colouration pattern. Characteristic are the brownish to black elytron with circular humeral and praeapical yellow spots (Figs 10b–13b, 14A). *Monolepta zonula*, *M. empatbulat* sp. nov. and some specimens of *M. mohamedsaidi* sp. nov. resemble this species in terms of colouration, particularly regarding the yellowish spot on elytron, but all three have a black head, while head in *M. signata* is always pale brown, reddish to yellowish. Total length of *M. signata* varied from 3.50–5.25 mm, quite similar to *M. zonula* (3.50–4.90 mm) while *M. empatbulat* sp. nov. (3.25–3.80 mm) and *M. mohamedsaidi* sp. nov. (3.25–4.00 mm) are on average smaller. The genitalic characters are quite different among these four species, and specimens can be clearly differentiated by a check of the male genitalia (Figs 14C, 25C, 47C, 56C).

Distribution. Probably the most abundant species of *Monolepta* in the Oriental Region from Pakistan (literature data) and southern China to Java and Bali, but not known from Wallacea (Fig. 15).

Monolepta jacobyi Weise, 1908

Figs 16–18

Monolepta jacobyi Weise, 1908: 326.

Replacement name for *Monolepta basimarginata* Jacoby, 1884a: 54 a junior homonym of *Galleruca basimarginata* Boisduval, 1835 a species from New-Guinea, transferred to *Monolepta* by Weise (1908).

Type material. *Monolepta basimarginata*. Lectotype: “Rawas, 5.78 / *Monolepta basimarginata* Boisd. ?” (RMNH; Fig. 16). Type locality: 2°31' S/102°54' E. Jacoby mentioned several locations (i.e., specimens) in his

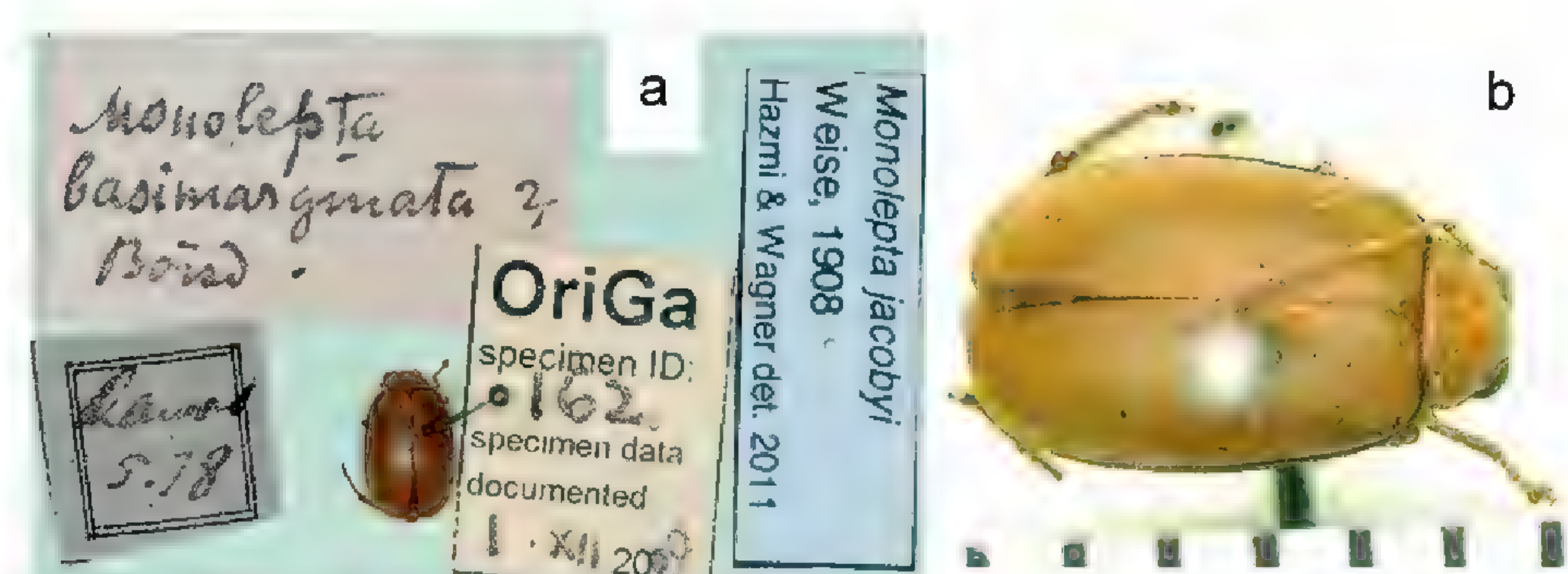


Fig. 16. Type material of *Monolepta jacobyi* Weise, 1908. – *Monolepta basimarginata* Jacoby, 1884, lectotype (RMNH).

original publication and we herein designate a lectotype to fix the name on a single specimen. The specimen has a location label from the type locality, the species name with “Boisd. ?” is in Jacoby’s handwriting, but not on usual light blue paper he used for type labels. Seems so that Jacoby was not completely convinced about his description.

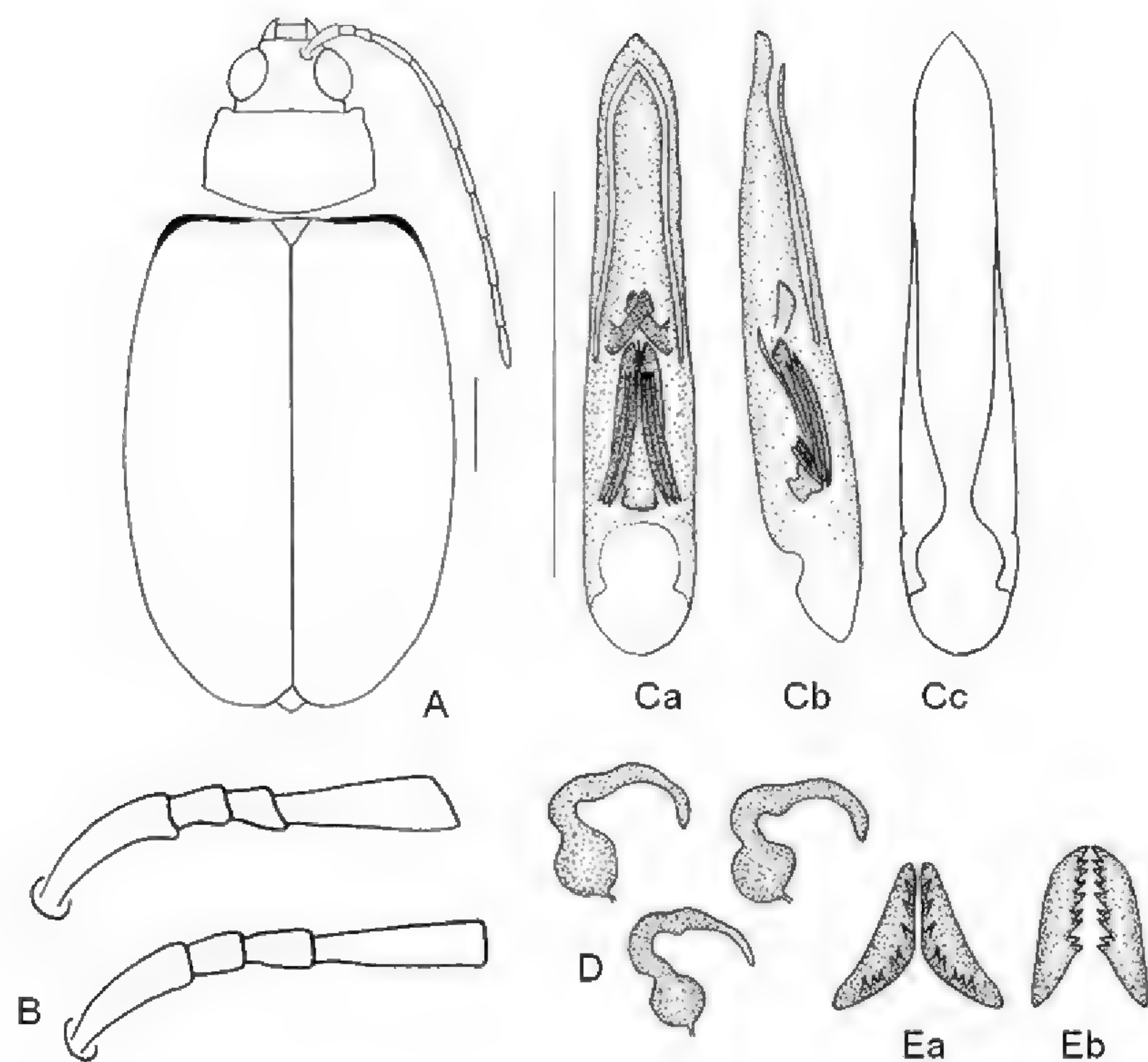


Fig. 17. *Monolepta jacobyi* Weise, 1908. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

Further material examined. – **Indonesia.** 14 ex., Java, Ardja-Sari, 6°11'S/107.67°E, Preanger (RMNH); 24 ex., Sumatra, 4°27' S/102°59' E, M. Knappert (RMNH); 3 ex., Java, Malang, 7°58' S/112°37' E, A. Koller (RMNH); 1 ex., Java, Piep (RMNH); 1 ex., Sumatra, Palembang, 2°59' N/104°45' E, M. Knappert (RMNH); 5 ex., Sumatra, Solok, 0°48' S/100°38' E, P. O. Stolz (RMNH); 4 ex., Sumatra, Padang, 0°58' S/100°37' E, J. D. Pasteur (RMNH); 1 ex., Palembang, Boengamas, 2°59' S/104°45' E, G. van Hassen (RMNH); 1 ex., W. Java (RMNH); 4 ex., Java, 7°35' S/110°42' E, Baly Coll. (BMNH); 1 ex., Sumatra, Sir S. Raffles (BMNH); 3 ex., Sumatra, Sibolangit, 3°18' N/98°35' E, Mjoberg (NHRS); 2 ex., Medan, 3°35' N/98°40' E, Mjoberg (NHRS); 1 ex., Lombok, 8°39' S/116°19' E, Carl Auriv (NHRS); 1 ex., Java, Desa Kembangan, 6°14' S/106°48' E, Drescher (MNHU); 2 ex., Sumatra (MNHU); 1 ex., Spjg., 0°27' S/100°54' E, X.1877 (RMNH); 2 ex., Sumatra, Pagherang-Pisang, X.1890.–III.1891, E. Modigliani (BMNH); 2 ex., Java occident., Mons Gede 4000', 6°46' S/106°57' E, VIII.1892, H. Fruhstorfer (RMNH); 3 ex., Java occident., Pengalengan 4000', 6°12' S/106°56' E, 1893, H. Fruhstorfer (RMNH); 1 ex., Java occident., Sukabumi, 6°55' S/106°55' E, 1893, H. Fruhstorfer (RMNH); 2 ex., Mentawai Sipo-

ra, 2°10' S/99°41' E, V.–VI.1894, Modigliani (MNHU); 12 ex., Borneo Exped.; Borneo, Poelau Sibau, VI.1894, Dr. J. Bultrofer (RMNH); 3 ex., Java, Banjoewangi, 8°12' S/114°22' E, 1910, Mac Gillavry (RMNH); 5 ex., Java, Nongkodjadjar, I.1911, E. Jacobson (RMNH); 4 ex., Sumatra, Siolak Daras, Korinchi Valley, 3100 ft., III.1914 (BMNH); 1 ex., Java, 1921, Kerkhoven (RMNH); 1 ex., West Sumatra, Siberut Island, 1°22' S/98°54' E, IX.1924, C.B.K. & N.S. (BMNH); 13 ex., Sipora Island, West Sumatra, 2°10' S/99°41' E, X.1924, C. B. K. & N. S.; H. H. Karny (BMNH); 1 ex., Indonesia, W. Java, Poentjak-pas, ca. 1000 m, Onderneming “Tjiliwoeng”, VI.1932, W. C. van Heurn (RMNH); 1 ex., Java, Moeria, 16.VII.1933, P. H. V. Doesburg (RMNH); 1 ex., East Java, Soerabaja and surroundings, 7°17' S/112°44' E, 1938, W.C. van Heurn (RMNH); 7 ex., N. Sulawesi, Mt. Ambang nr Kotamobagu, 0°44' N/124°18' E, 20 km E of alt. m. ca. 1000, 28.–29.V.1985, J. Huijbregts (RMNH); 25 ex., Sulawesi Utara, Danau Modat, 1200 m near Kotamobagu, 0°43' N/124°27' E, VIII.1985 (BMNH); 1 ex., C Sulawesi, Lore Lindu NP Dongi Dongi Shelter, 1°31' S/120°11' E, alt. 940 m, 3.–9.XII.1985, J. Krikken (RMNH); 1 ex., Sumatra, Umg. Prabal, 1050 m, 2°47' N/98°56' E, VIII.1992, U. Buchsbaum (NME); 6 ex., S Sumatra, Lampung Prov., Bukit Barisan Selatan, 5°4' S/104°4' E, 7.–17.II.2000, Liwa, J. Bezděk (CJB); 1 ex., Indonesia, Bali, 8°24' S/115°11' E, 19.–21.III.2007, B. H. Izfa (UKM). – **Malaysia.** 1 ex., Perak, 4°48' N/100°48' E, Doherty (BMNH); 1 ex., Malay Penin., Selangor F. M. S., Kuala Lumpur, Batu Caves, 3°15' N/101°40' E, IX.1921, H. M. Pendlebury (BMNH); 5 ex., Perak, F. M. S. Jor camp, 3°54' N/101°34' E, VIII.–IX.1922, E. Seimun (BMNH); 12 ex., Perak, F. M. S. Batang Padang, Jor Camp, 3°54' N/101°34' E III.1924, F. M. Pendlebury (BMNH); 1 ex., Malaya, Terengganu, Jerangau Estate, 4°54' N/103°11' E, 7.II.1966, Dept. of Agriculture (BMNH); 1 ex., S. W. Sabah nr Long Pa Sia (East) ca. 1000 m, 5°20' N/117°10' E, 25.XI.–7.XII.1987, C. v. Achterberg (RMNH); 2 ex., Perak, Tapah, Lata Iskandar, 4°12' N/101°15' E, 3.–4.IV.1990, 15.IX.1995, Ismail & Ruslan (UKM); 1 ex., Borneo, Sarawak, Kuching, Bako National Park, 1°43' N/110°28' E, 5.V.1999, P. Vortruha (CJB); 3 ex., Kelantan, 90 km N of Gua Musang, Mt. Basor 1770 m, III.2015, P. Cechovsky (CJB). – **Philippines.** 1 ex., Philli. Island (BMNH); 1 ex., Los Banos, 14°10' N/121°14' E, P. I. Baker (NHRS); 1 ex., Luzon, 16°33' N/121°15' E, Semper (IRSN); 1 ex., Coll. Duvi vier (IRSN); 1 ex., Manila 14°35' N/120°59' E (MNHU); 4 ex., Luzon, Id. Nueva Viscaya, Sta. Fe. Dalton Pass, 16°35' N/121°15' E, 900 m, 8.–12.VI.1991, Rolland A. Muller (RMNH); 2 ex., N. Luzon, Mts. Prov. Chatel, 17°02' N/121°03' E, 24.IX.–14.X.1988, Cerny & Schintlmeister (MNHU); 10 ex., N. Luzon, Ifugao Banaue vic., 16°54' N/121°06' E, 22.IX.–16.X.1988, Cerny & Schintlmeister (MNHU). – **Singapore.** 2 ex., Singapore, 1°21' N/103°49' E, C. J. Saunders (BMNH).

Redescription

Total length. 6.40–7.70 mm (mean 6.86 mm; $n = 10$).

Head. Finely punctuated, entirely pale yellow to brown. Labrum and mandible brown. Antenna slender, extending beyond the middle of elytra, entirely yellow (Fig. 17A) or terminal antennomere with brownish tip (Fig. 16b). Second and third antennomere approximately of the same length; ratio length of second to third antennomere 0.80–1.00 (mean 0.92); ratio length of third to fourth antennomere 0.36–0.45 (mean 0.40; Fig. 17B).

Thorax. Pronotum sparsely punctuated, entirely yellow, surface slightly convex. Pronotal width 2.00–2.25 mm (mean 2.12 mm), ratio length to width 0.59–0.61 (mean 0.60). Scutellum yellow. Meso- and metathorax black. Elytron yellow, basal margin black, sometimes extend to the lateral margin as up to anterior half; finely punctuated. Elytral length 5.25–6.00 mm (mean 5.61 mm), maximal width of both elytra together 3.50–4.00 mm (mean 3.79 mm), ratio of maximal width of both elytra together to length of elytron 0.66–0.70 (mean 0.68). Legs yellow to pale brownish.

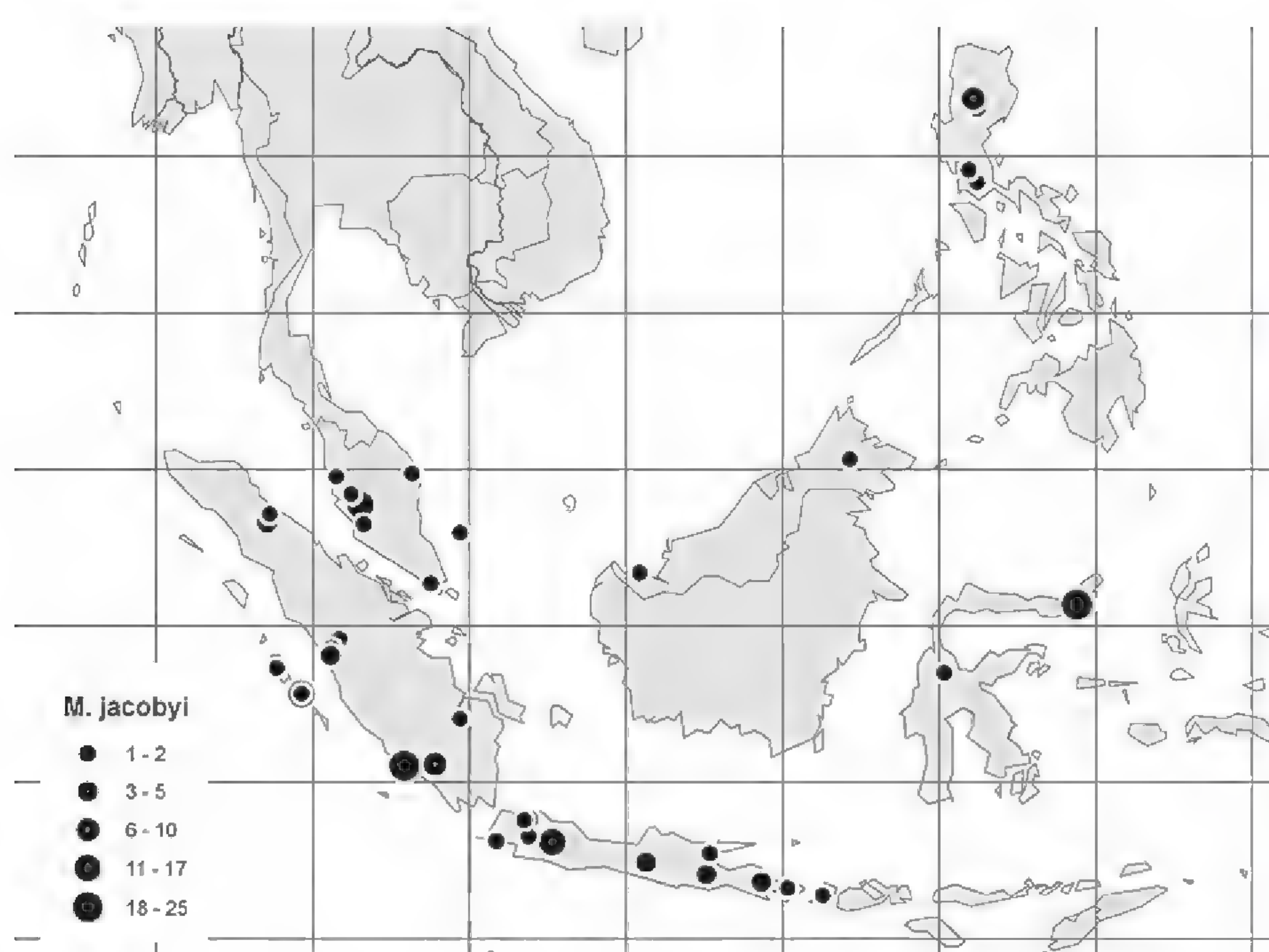


Fig. 18. Distribution of *Monolepta jacobyi* Weise, 1908.

Abdomen. Yellow to yellowish-brown.

Male genitalia. Median lobe long and slightly conical towards apex. Median spiculae long and slender, lateral spiculae club-shaped with lobe-like apex (Fig. 17Ca), ventral spiculae weakly sclerotised, hardly visible. Ventral groove very broad and continuously convergent to the orifice (Fig. 17Cc).

Female genitalia. Spermatheca with spherical nodulus, median part long and curved cornu (Fig. 17D). Bursa sclerites strongly sclerotized; dorsal and ventral bursa sclerites almost of the same size, both carrying strong spines (Fig. 17E).

Diagnosis. *Monolepta jacobyi* is one of the largest *Monolepta* species of Sundaland (total length 6.40–7.70 mm). This yellowish species with narrow black elytral base at humeri looks similar to the much smaller

M. kuninghitam sp. nov. (total length 3.70–4.35 mm). The genitalic characters are very different between both species (Figs 17C–E, 51C–E). The combination of large size, uniform yellow dorsal colouration with narrow black base at humerus is very characteristic for *M. jacobyi*.

Distribution. This abundant species is mainly known from the Sundaland area, eastwards to Sulawesi (Fig. 18).

Monolepta orientalis Jacoby, 1889

Figs 19–21

Monolepta orientalis Jacoby, 1889: 227.

= *Monolepta konbirensis* Duvivier, 1891: 47 (syn. by Maulik 1936: 407).

Type material. *Monolepta orientalis*. Syntypes: “India / *Monolepta orientalis* Jac. / 1st Jacoby Coll. / Type 18437” (MCZH; Fig. 19); “Bhamo, Birmania, Fea VIII. / *orientalis* Jac. / *Monolpet aorientalis* Jac.” (MCGD).

Monolepta konbirensis: Type material is not available to us, Maulik (1936) mentioned three specimens in coll. Duvivier in BMNH. We adopt Maulik's (1936) statement that it is a junior synonym of *Monolepta orientalis* Jacoby, 1889.

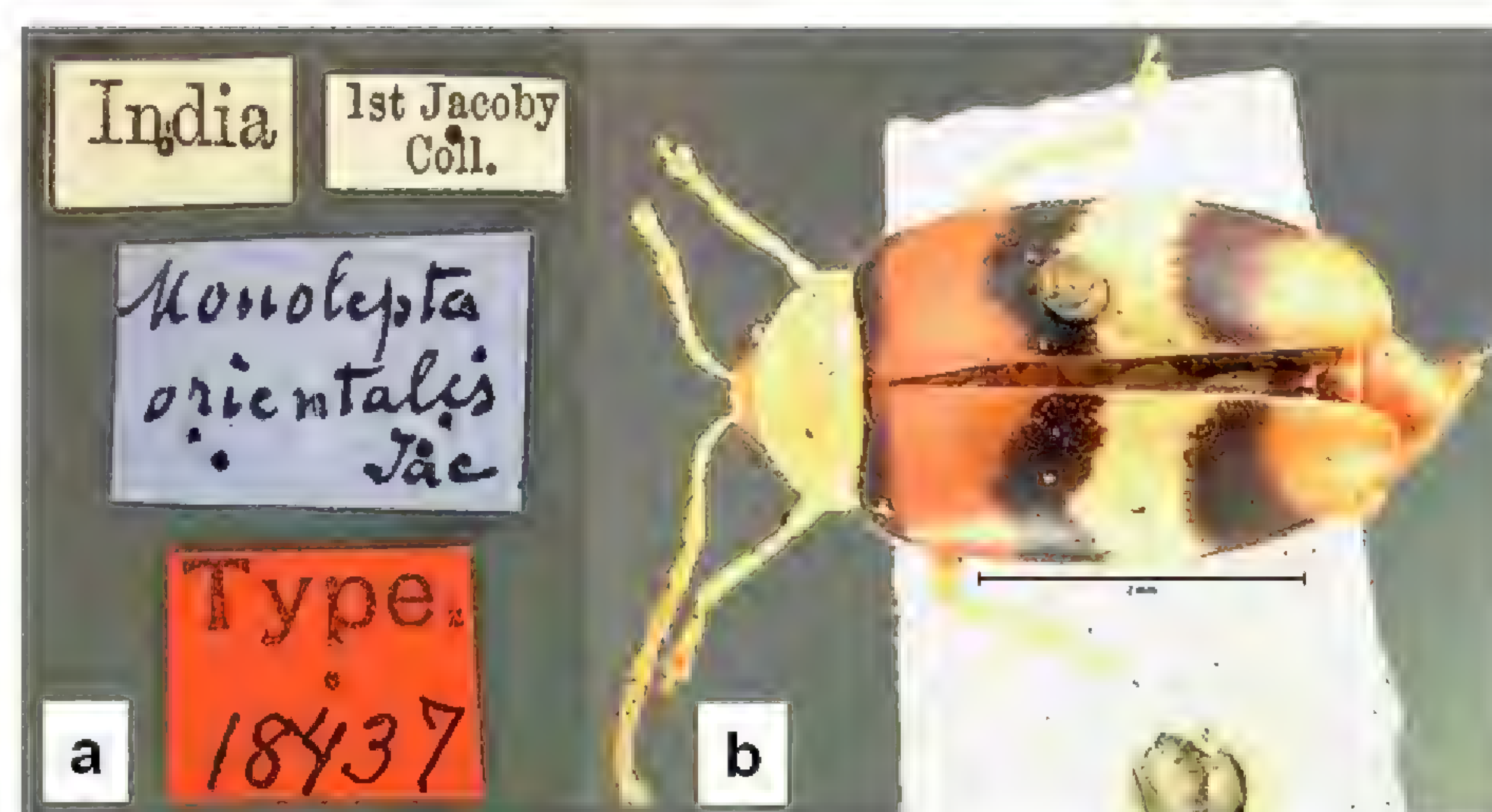


Fig. 19. Type material of *Monolepta orientalis* Jacoby, 1889, syntype (MCZH).

Further material examined. – **Bangladesh.** 2 ex., Bengal (BMNH); 18 ex., Bengal, Mandar, 23°41' N/90°21' E, VII.1891, P. Cardon (IRSN). – **India.** 1 ex., India (IRSN); 1 ex., Kanara (BMNH); 2 ex., Khasia Hills, 25°34' N/91°39' E (BMNH); 1 ex., Bombay, 18°54' N/73°05' E (BMNH); 1 ex., Nandidrug, S. India, T. V. C (BMNH); 2 ex., South India, Pondicherry State, 10°55' N/79°50' E, Karikal (MNHU); 1 ex., South Mysore, 12°16' N/76°38' E, H. E. Andrewes (BMNH); 19 ex., Nilgiri Hills, 11°25' N/76°30' E, G. F. Hampson, H. E. Andrewes, A. K. Weld Downing (BMNH); 4 ex., Travancore, Wallardi, Collection J. Achard (BMNH); 1 ex., Nilgiri Hills, 11°25' N/76°30' E, A. K. Weld Downing (BMNH); 5 ex., Belgaum, 15°51' N/74°30' E, 1891 (BMNH); 1 ex., Deolali, 19°28' N/74°37' E, 1.I.1922, Maj. J. E. M. Boyd (BMNH); 28 ex., South India, S. Co-

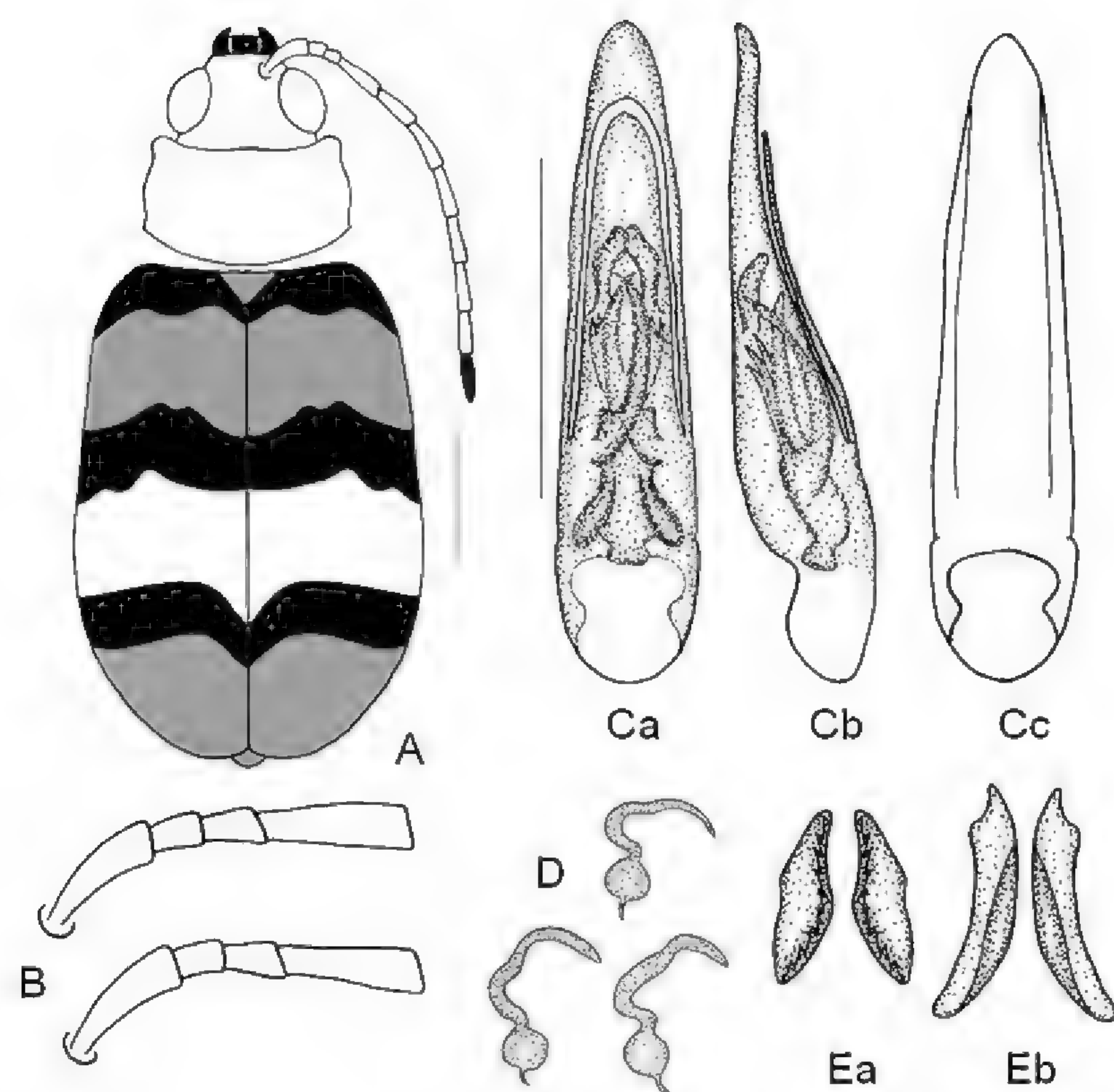


Fig. 20. *Monolepta orientalis* Jacoby, 1889. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

org-Ammatti, 3100 ft., 12°25' N/75°44' E, II.–XI.1952, P. S. Nathan (IRSN); 1 ex., Anamalai Hills, Cinchona 3500 ft., V.1967, P.S.N. (MNHU); 2 ex., South India, Karnataka State, Chikmagalur, 13°18' N/75°46' E, V.1982, 4000 ft., T. R. S. Nathan (CJB); 1 ex., North Indien, 600 m Uttar Pradesh, Shiwalik Kette, 13 km SW Dehra Dun, 27°34' N/80°05' E, 20.VIII.1985, J. Schulze (MNHU); 1 ex., India, Kerala, 27 km S. Calicut, Univ. Calicut Botanical Garden, 11°15' N/75°46' E, 6.X.1985, N. F. Johnson, D. C. Darling (CJB); 1 ex., N. India, Chandigar, 30°43' N/76°46' E, VIII.1986, K. Werner (MNHU); 1 ex., Pune, 18°31' N/73°51' E, II.–IX.1997, H. V. Ghate (BMNH). – **Indonesia.** 1 ex., Batavia, Tanjong Priok, 6°07' S/106°52' E, 90-80 (BMNH). – **Malaysia.** 1 ex., Malay Penin. (BMNH); 1 ex., Island of Penang, 5°15' N/100°29' E, Baker (NHRS); 1 ex., Malay Penin., West Coast, Langkawi Is., 6°21' N/99°47' E, 28.IV.1928 (BMNH); 1 ex., Kedah, Pulau Langkawi, Teluk Datai, 6°23' N/99°42' E, 20.V.1992, Ismail et al. (UKM); 2 ex., Perlis, Taman Negeri Wang Klian, 6°40' N/100°11' E, 29.IX.–4.X.1999, Zaidi et al. (UKM). – **Myanmar.** 1 ex., N. Toungoo, L. Burma, 18°56' N/96°25' E, XII.26, H. G. C. (BMNH). – **Nepal.** 3 ex., Chitwan Nat. Pk., 700', 27°29' N/84°24' E, 3.–6.VI.1983, Sauraha, at MV light (BMNH). – **Sri Lanka.** 3 ex., Konbi (MNHU); 7 ex., Band., Horn (MNHU); 3 ex., Ceylon, 30388 (MNHU); 1 ex., Weligama, 5°58' N/80°26' E, 1899, W. Horn (MNHU); 10 ex., Kandy, 7°18' N/80°36' E, VI.–IX.1907/1916, G. E. Bryant (BMNH); 2 ex., Fraserpet, Coorg., VII.1930, F. R. I. Sandal, Insect Survey (BMNH); 4 ex., Ayur, North Salem, VII.–II.1930/31, F. R. I. Sandal, Insect Survey (BMNH).

Redescription

Total length. 4.10–5.80 mm (mean 4.68 mm, n = 10).

Head. Very finely punctuated, entirely brownish-yellow. Labrum and mandible black. Antenna slender, extending almost to the middle of elytra, entirely yellow, terminal antennomere usually blackish (Fig. 20A). Second and third antennomere approximately of the same length; ratio length of second to third antennomere 0.85–1.00 (mean 0.97); ratio length of third to fourth antennomere 0.30–0.44 (mean 0.37; Fig. 20B).

Thorax. Pronotum finely punctuated, entirely yellow, rarely yellowish-brown. Pronotal width 1.20–1.80 mm (mean 1.52 mm), ratio length to width 0.55–0.59 (mean 0.58). Scutellum brownish. Meso- and metathorax reddish to brownish. Elytron reddish-brown with a broad yellowish transverse band beyond the middle, bounded above and below by a narrow black band, and another narrow black band at base. In few specimens, elytron black with one transverse brown-reddish band at the basal half. Elytral length 2.90–4.50 mm (mean 3.68 mm), maximal width of both elytra together 2.10–3.50 mm (mean 2.73 mm), ratio of maximal width of both elytra together to length of elytron 0.70–0.78 (mean 0.74). Legs yellow to yellowish-brown, middle and hindfemur dark brown, often also hind-tarsis darker.

Abdomen. Brownish-red.

Male genitalia. Median lobe broad, becomes significantly narrowed towards apex. Few strong, slightly curved median spiculae, lateral spiculae broad, slightly s-shaped curved (Fig. 20Ca), ventral spiculae short and strong (Fig. 20Cb).

Female genitalia. Spermatheca with small nodulus, long, slender and curved cornu (Fig. 20D). Dorsal bursa sclerites with spines, ventral one only slightly longer than dorsal spiculae, only with undulate margin (Fig. 20E).

Diagnosis. *Monolepta orientalis* can be easily distinguished by the specific colouration pattern on the elytra (Figs 19b, 20A) it is, together with size, and some external measurements, somewhat similar to *M. flavofasciata* (Figs 22a, 23A). In doubtful cases, species delimitation can be easily done by the significant differences in genital patterns of both sexes (Figs 20C–E, 23C–E).

Distribution. Widely distributed in the north-western part of the Oriental Region, in particular in India (Fig. 21).

Monolepta flavofasciata Jacoby, 1889
Figs 21–23.

Monolepta flavofasciata Jacoby, 1889: 229.

Type material. Jacoby mentioned at least two specimens “Bhamoó, August 1885, also Pulo Penang (coll. Jacoby)” in his original publication. One syntype is available in MCGD “Bhamo, Birmania, Fea VIII.1885 / flavofasciata Jac. / *Monolepta flavofasciata* Jac”. The specimen from MCZH (Fig. 22) is not a type, since col-

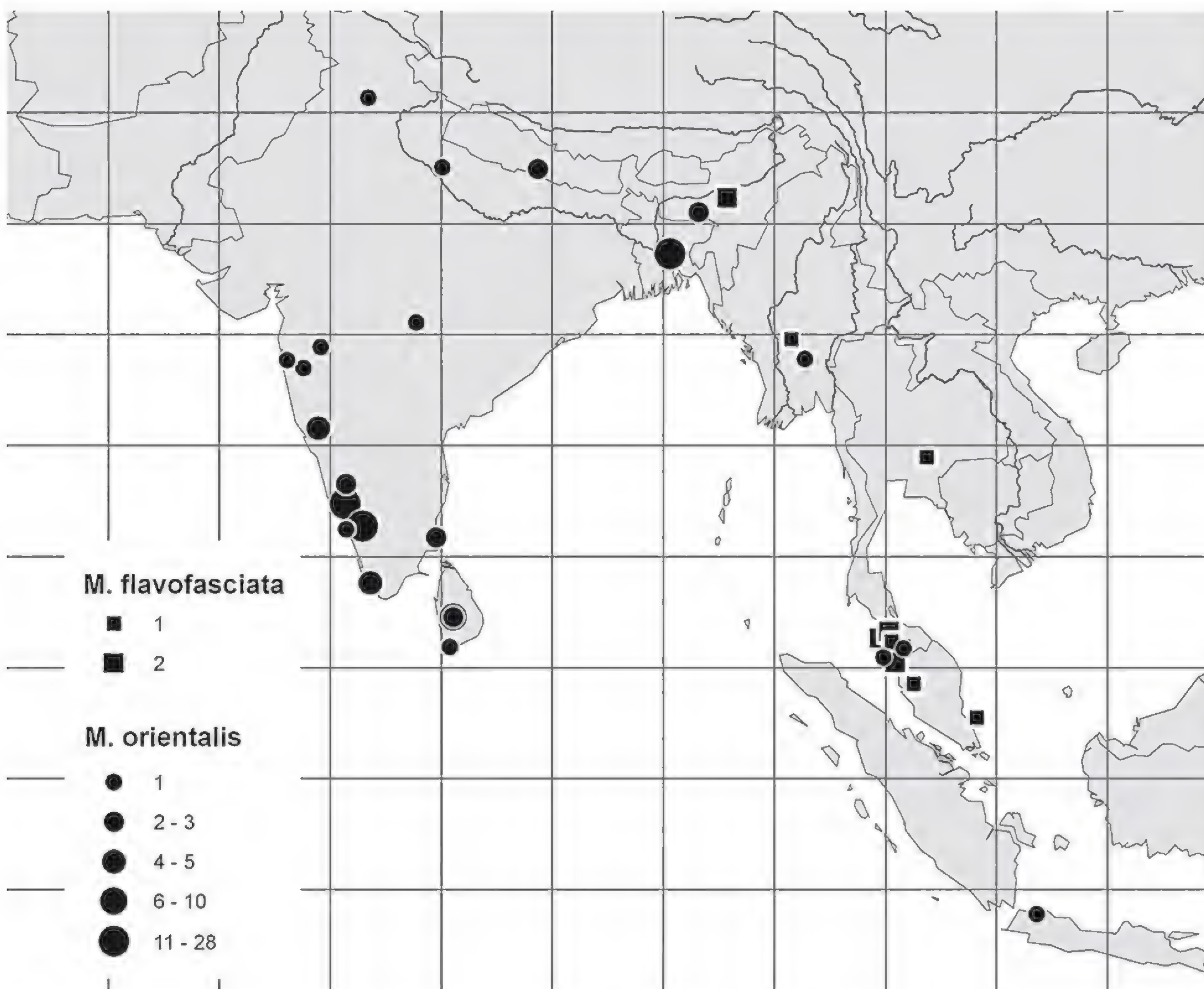


Fig. 21. Distribution of *Monolepta orientalis* Jacoby, 1889 and *M. flavofasciata* Jacoby, 1889.

leted later and from another locality, but is surely conspecific.

Further material examined. – **India.** 2 ex., Assam, Palkai, 26°12' N/92°56' E, Fry Coll. 1905.100, Doherty (BMNH). – **Malaysia.** 1 ex., Island of Penang, 5°15' N/100°29' E, Baker (NHRS); 1 ex., Penang, 5°15' N/100°29' E, G. E. Bryant, XI.1913 (BMNH); 1 ex., Malay Penin. Kedah, Alor Star, Gunong Keriang, 6°11' N/100°19' E, 1.IV.1928 (UKM); 1 ex., Malay Penin., West Coast, Langkawi Is., 6°21' N/99°48' E, 25.IV.1928 (BMNH); 1 ex., Perak, Tapah, Lata Iskandar, 4°19' N/101°19' E, 3.–4.IV.1990, Zaidi, Ismail, Ruslan (UKM); 1 ex., Pahang, Pulau Tioman, 2°47' N/104°08' E, 16.–18.VIII.1994, Ismail & Jazmi (UKM); 1 ex., Kedah, P. Langkawi, Lubuk Sembilang, 6°21' N/99°48' E, 20.V.1995, Ismail, Ruslan & Sham (UKM); 2 ex., Perlis, Taman Negeri Wang Klian, 6°40' N/100°11' E, 29.IX.–4.X.1999, Zaidi, Ismail, Azman (UKM). – **Thailand.** 1 ex., E. Thailand, Nakhon Ratchasima Prov., Sakaer-



Fig. 22. Material of *Monolepta flavofasciata* Jacoby, 1889, no type, but collected nearby type locality at same time (MCZH).

at Biosphere Reserve, 14°30' N/101°55' E, VI.1995, Ghazoul & Inward (BMNH).

Redescription

Total length. 4.30–5.80 mm (mean 5.05 mm; n = 0).

Head. Very finely punctuated and entirely pale yellow. Labrum and mandible black. Antenna slender and extending almost to the middle of the elytra, pale yellow and

only terminal antennomere partly brownish (Fig. 22b, 23A). Third antennomere slightly longer than second; ratio length of second to third antennomere 0.75–1.00 (mean 0.88); ratio length of third to fourth antennomere 0.44–0.50 (mean 0.47; Fig. 23B).

Thorax. Pronotum very finely punctuated, entirely pale yellow, parallel-sided and a bit widened posteriorly. Pronotal width 1.40–1.80 mm (mean 1.60 mm), ratio length to width 0.56–0.58 (mean 0.57). Scutellum, meso- and metathorax black. Elytron finely punctuated, black with a broad yellowish transverse band beyond the middle and brown-reddish band in the apical part (Figs 22b, 23A). Elytral length 3.40–4.60 mm (mean 4.00 mm), maximal width of both elytra together 2.50–3.30 mm (mean 2.90 mm), ratio of maximal width of both elytra together to length of elytron 0.72–0.74 (mean 0.73). Foreleg yellow, mid and hindlegs blackish (Fig. 22b).

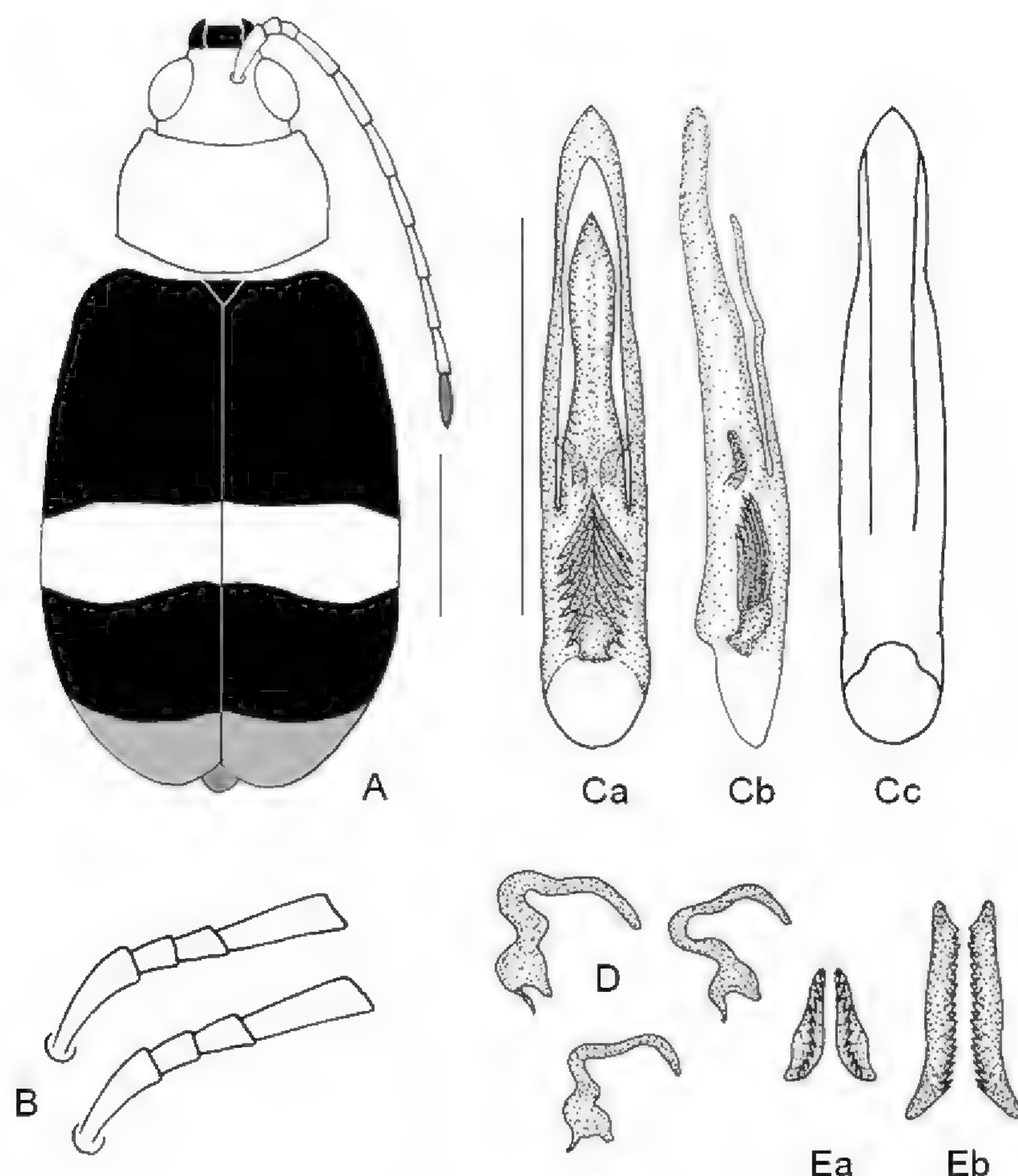


Fig. 23. *Monolepta flavofasciata* Jacoby, 1889. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

Abdomen. Pale brown to reddish, strongly contrasting to the black metathorax.

Male genitalia. Median lobe of this species is comparatively small, parallel-sided in the basal two thirds and narrowed in the apical third (Figs 23Ca, Cc). Tectum is short, narrow in the middle, lanceolate (Fig. 23Ca). Ventral spiculae most likely weakly sclerotised and hardly visible lateral spiculae broad, simply curved structures (Figs 23Ca, Cb), median spiculae short, slender bristles (Figs 23Ca, Cb).

Female genitalia. Spermatheca with small spherical nodulus with broad ridge, long and curved cornu (Fig. 23D). Bursa sclerites small and slender (Fig. 23E).

Diagnosis. Elytral colouration of *M. flavofasciata* is very characteristic by its broad black base, a small transverse yellow band around the middle, followed by a broader transverse black band that is reaching the outer elytral margin, and a reddish elytral apex. Most similar in elytral colouration is *M. orientalis*, but with brown-reddish elytra with broad yellowish transverse band in the middle, bounded above and below by a narrow black band, and another narrow black band is placed across the basal margin (Figs 19b, 20A, 22b, 23A). The genitalic characters of both species are very different in both sexes (Figs 20C–E, 23C–E).

Distribution. Known from East-India, Myanmar and Thailand to the Malayan Peninsula (Fig. 21).

Monolepta zonula Weise, 1916

Figs 24–26

Monolepta zonula Weise, 1916: 40.

Replacement name for *M. fasciatipennis* Jacoby, 1892: 983, a junior homonym of *M. fasciatipennis* Blackburn, 1888: 180.

= *Monolepta fasciatipennis* Jacoby, 1892: 983 (Weise, 1916), replacement name for *M. albofasciata* Jacoby, 1889: 228, a junior homonym of *M. albofasciata* Jacoby, 1884b: 235.

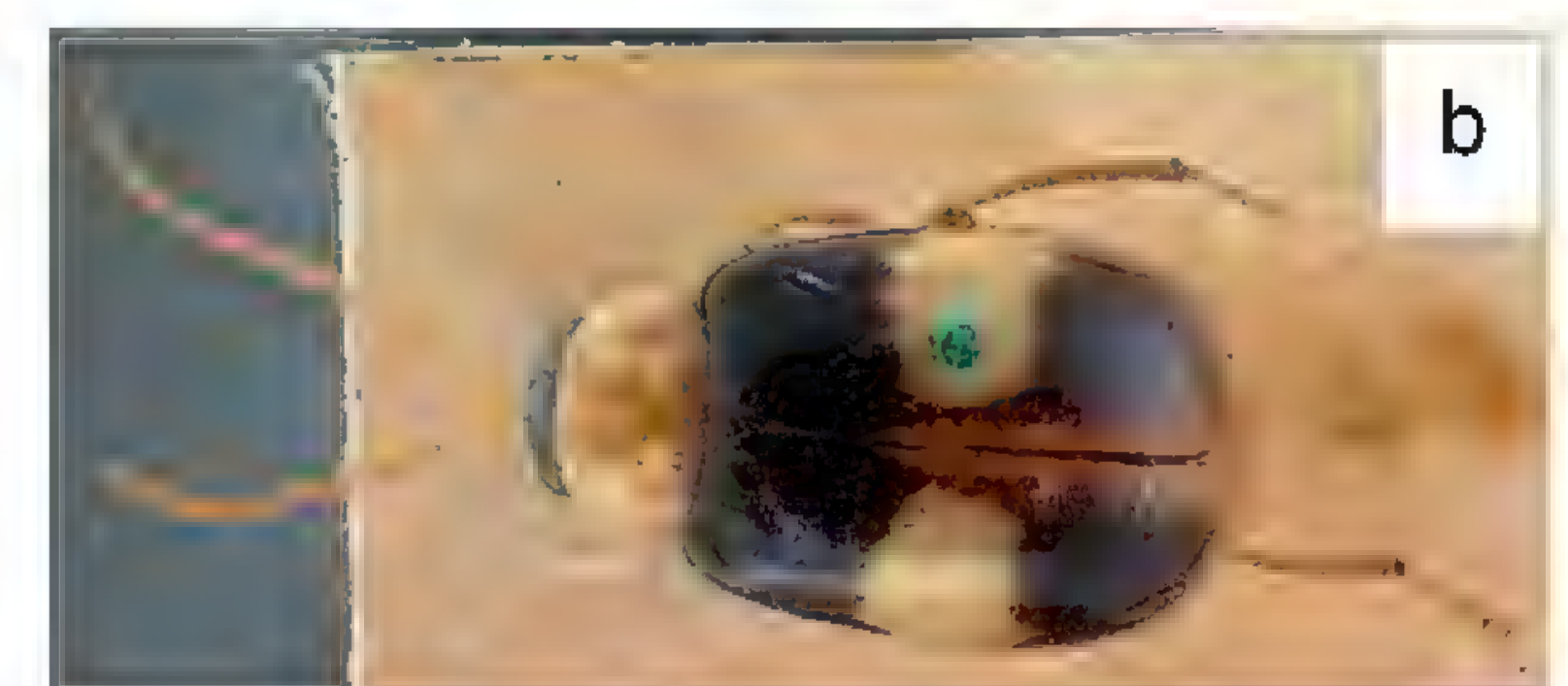
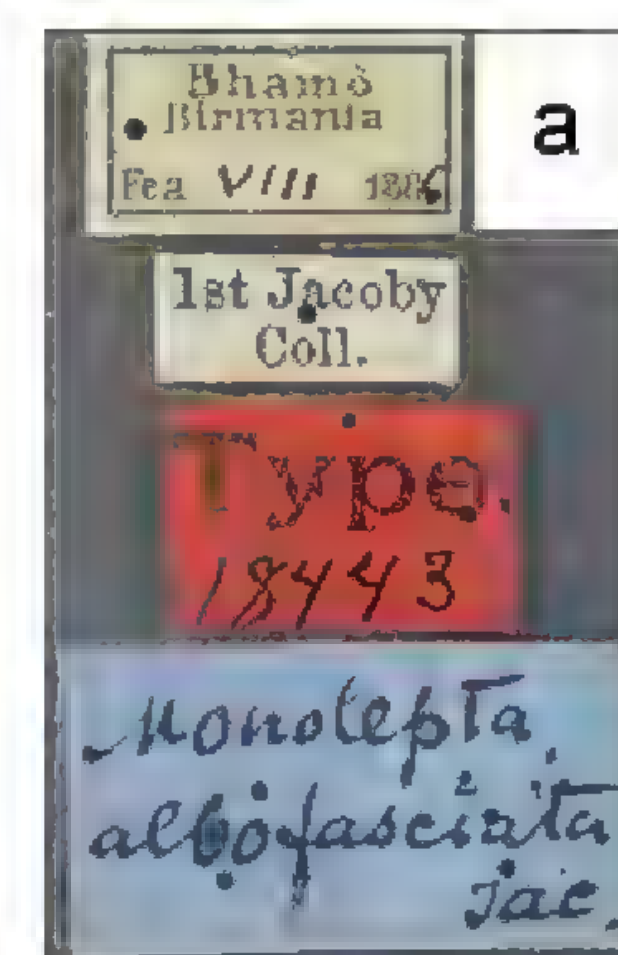


Fig. 24. Type material of *Monolepta zonula* Weise, 1916. – *Monolepta albofasciata* Jacoby, 1889, syntype (MCZH).

Type material. Syntypes: “Bhamo, Birmania, Fea viii.1886 / *Monolepta albofasciata* Jac. / 1 st Jacoby Coll. / Type 18443” (MCZH; Fig. 24), each a further syntype with the same data in MCGD and BMNH.

Further material examined. – **Indonesia.** 1 ex., Java Occ., MG Piepers (RMNH); 2 ex., Sumatra, Manna, 4°27' S/103°01' E, 1902, M. Knappert (RMNH); 1 ex., Sarawak, Kuching, Bako NP, 1°42' N/110°28' E, V.1999, P. Votruba (CJB). – **Malaysia.** 19 ex., Malay Penin, Kuala Lumpur, 3°06' N/101°39' E, Expd. Agrc. Dept. (BMNH); 1 ex., Sandakan, 5°50' N/118°03' E, C. V. Creagh, 1896 (BMNH); 1 ex., Kuching, 1°31' N/110°20' E, J. E. A. Lewis, 1910 (BMNH); 1 ex., Penang, 5°25' N/100°29' E,

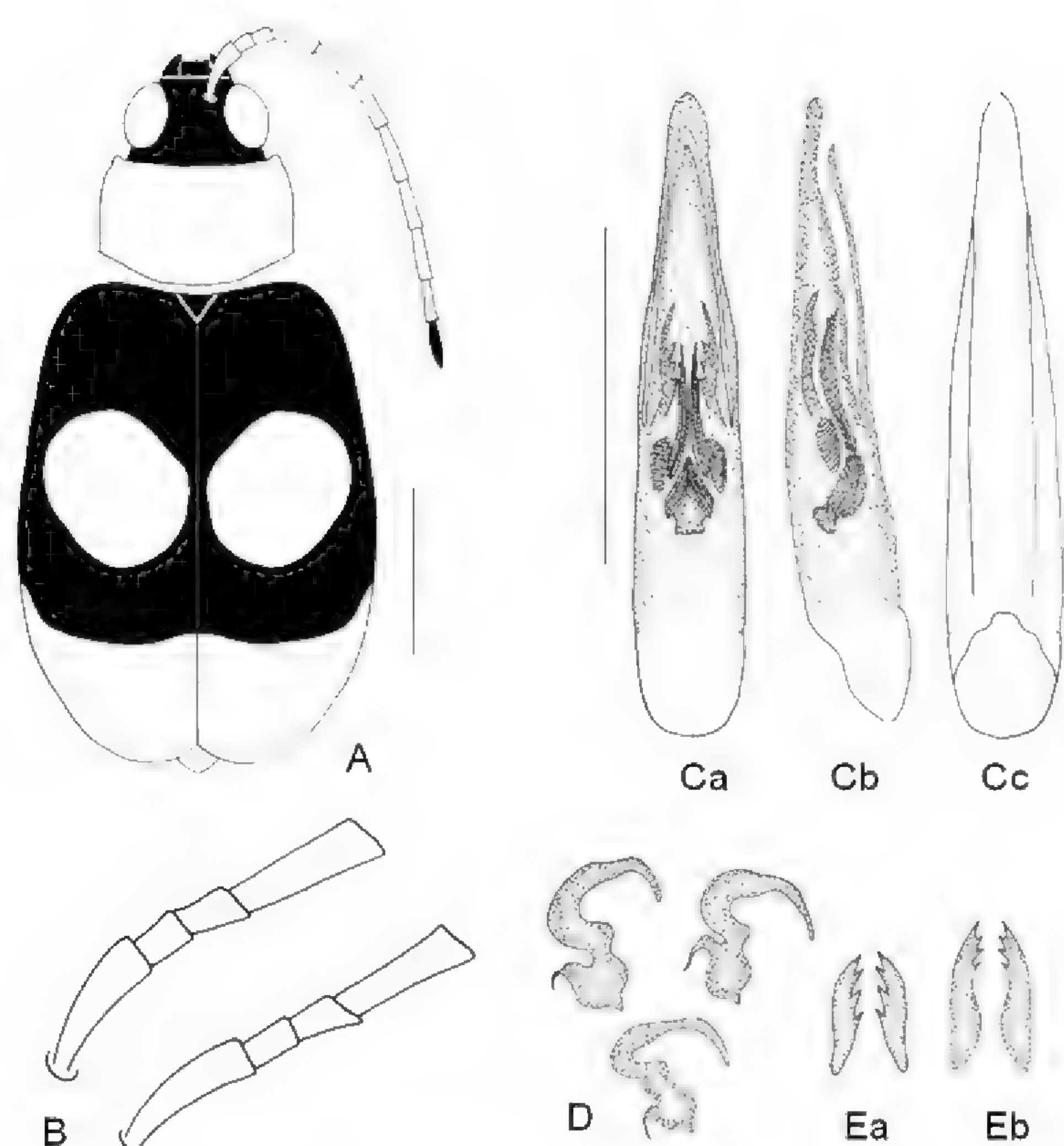


Fig. 25. *Monolepta zonula* Weise, 1916. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

J. E. A. Lewis, 1910-116 (BMNH); 7 ex., Malay Penin, Kuala Selangor, 3°20' N/101°15' E, IX.1912, Expd. Agrc. Dept. (BMNH); 4 ex., Malay Penin., Blackwater Est Klang, 3°02' N/101°26' E, VI.1916, Expd. Agrc. Dept. (BMNH); 1 ex., Malay Penin, Selangor-Kuala Lumpur, 3°30' N/101°31' E, 1929, H. M. Pendlebury (BMNH); 1 ex., West Malaysia, Perak, Maxwell Hills, 4°47' N/100°45' E, 3700-4500 ft., 13.II.1932, H. M. Pendlebury (BMNH); 1 ex., Malay Penin, Negeri Sembilan, Port Dickson, 2°32' N/101°48' E, 21.II.1933 (BMNH); 2 ex., GAP Malaysia, 21.III.1974, Y. Kiyoyama (CTJ); 1 ex., Sarawak, Gunong Mulu Nat. Park, 3°55' N/114°46' E, R. G. S. Exped. 24.VI.1977/78, J. D. Holloway et al. (BMNH); 1 ex., Kuala Lumpur, Jln Pantai Baru, 3°06' N/101°39' E, 11.II.1982, R. Sulaiman (UKM); 1 ex., N. Sembilan, Hulu Bendul, 2°44' N/102°08' E, 27.I.1989, Kamaruzaman (UKM); 1 ex., Sabah, Pulau Manukan, 5°58' N/116°E, 1.X.1991, Zaidi & S. Abin (UKM); 1 ex., West Malaysia, Perak, Maxwell Hills, 4°47' N/100°45' E, 900-1000 m, 12.-16.I.1995, S. Bevar (CJB).

Redescription

Total length. 3.50–4.90 mm (mean 4.36 mm, $n = 10$).

Head. Finely punctuated, entirely blackish. Labrum and mandibulae blackish. Antenna slender, extending almost to middle of the elytra, yellowish, the extreme apex of the last antennomere blackish (Fig. 25A). Second and third antennomere roughly of the same length; ratio length of second to third antennomere 0.87–1.00 (mean 0.97); ratio length of third to fourth antennomere 0.38–0.43 (mean 0.42; Fig. 25B).

Thorax. Pronotum very finely punctuated, usually pale yellow rarely up to pale brown, transversely convex, and the sides slightly rounded. Pronotal width 1.05–1.55 mm (mean 1.32 mm), ratio length to width 0.61–0.64 (mean 0.63). Scutellum, meso- and metathorax black. Elytron finely punctuated, black with one yellow spots in the middle on disc (Fig. 25A), often apical two thirds along the suture reddish (Fig. 24b), rarely also with dark-red-dish spot at humerus. Elytral length 2.75–3.85 mm (mean 3.34 mm), maximal width of both elytra together 2.00–2.80 mm (mean 2.43 mm), ratio of maximal width of both elytra together to length of elytron 0.71–0.75 (mean 0.73). Legs yellow to yellowish-brown.

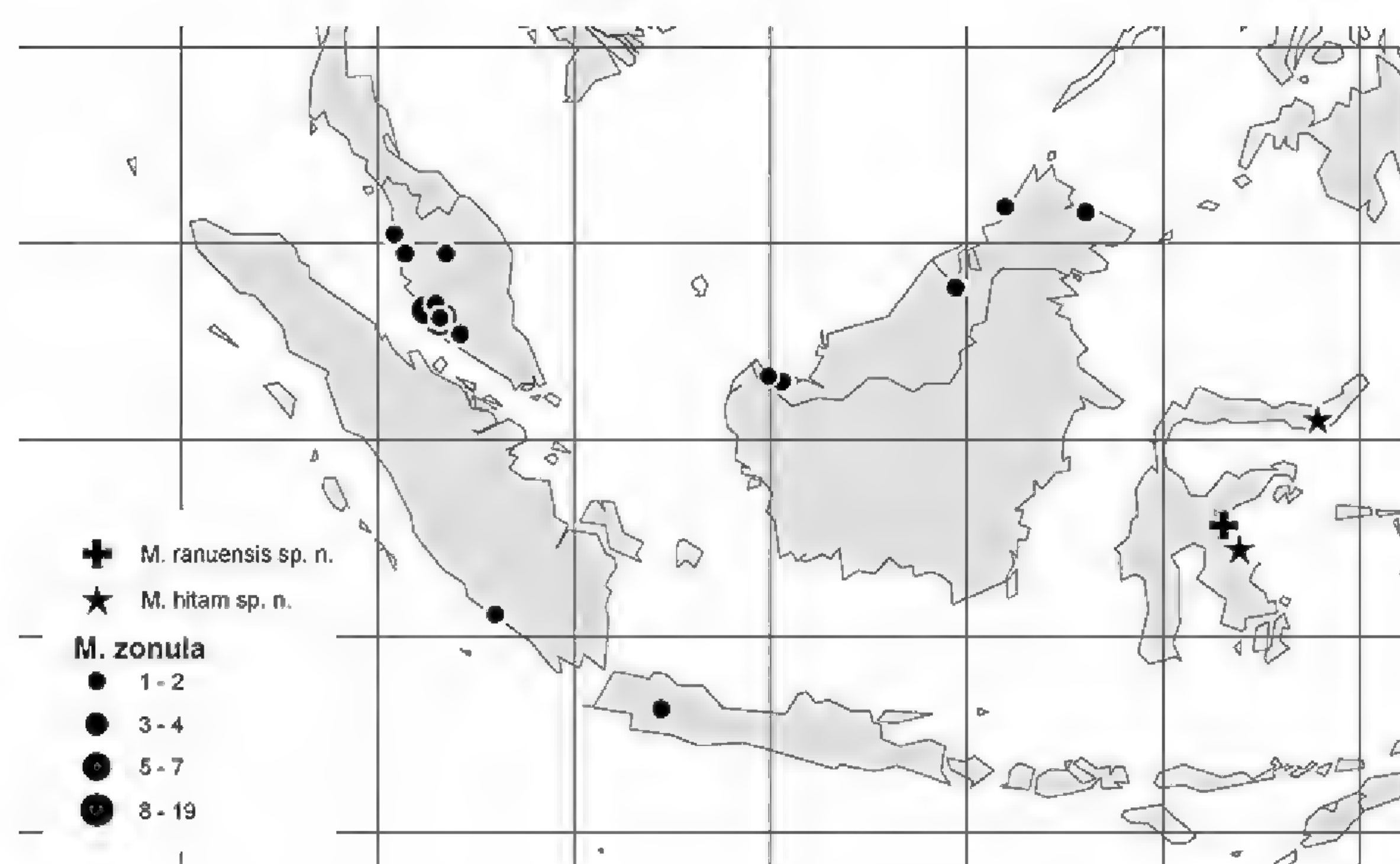


Fig. 26. Distribution of *Monolepta zonula* Weise, 1916, *M. ranuensis* sp. nov. and *M. hitam* sp. nov.

Abdomen. Pale yellow to brown.

Male genitalia. Median lobe parallel-sided at base, strongly narrowed in the apical quarter (Figs 25Ca, Cc). Median spiculae few short and slender spines, lateral spiculae broad, spiny structures, ventral spiculae very fine (Fig. 25C).

Female genitalia. Spermatheca with spherical nodulus having strong ridge, long and curved median part and short al slender cornu (Fig. 25D). Bursa sclerites, small and both pairs approximately of same size (Fig. 25E).

Diagnosis. *Monolepta zonula* looks most similar to *M. signata*, *M. empatbulat* sp. nov. and *M. mohamedsaidi* sp. nov. These four species have black elytron with circular yellowish spot at least on the basal half of elytron (Figs 14A, 25A, 47A, 56A) in common, with apical elytral quarter usually yellow. Head is usually black contrasting to the yellow pronotum in *M. zonula*, *M. empatbulat* sp. nov. and *M. mohamedsaidi* sp. nov. while pale brown to reddish-brown in *M. signata*. From *M. empatbulat* sp. nov. and *M. mohamedsaidi* sp. nov. it can be differentiated partly by size (total length *M. zonula* 3.50–4.90 mm; *M. empatbulat* sp. nov. 3.25–3.80 mm, *M. mohamedsaidi* sp. nov. 3.35–4.00 mm). In doubtful cases the median lobe with strong conical shape and the

broad lateral spiculae (Figs 14C, 25C, 47C, 56C) allows a clear differentiation.

Distribution. This species is known from Peninsular Malaysia, Borneo and Sumatra (Fig. 26).

Monolepta mentaweiensis (Jacoby, 1896)
Figs 27–30

Candezea mentaweiensis Jacoby, 1896: 143.

= *Monolepta basalis* Jacoby, 1884: 55 (Weise 1924: 78).

= *Monolepta hageni* Weise, 1916: 40; syn. nov.

Candezea mentaweiensis is the next available name given priority over *Monolepta basalis* Jacoby, 1884 because of its junior homonymy over *M. basalis* Harold, 1880: 26. The senior homonym, described from East Africa, is meanwhile transferred to *Bicolorizea* (Heunemann et al. 2015), but the junior homonym cannot be revalidated after article 57.2. (IZCN-Code).



Figs 27–28. Type material of *Monolepta mentaweiensis* (Jacoby, 1896). – 27. *Candezea mentaweiensis* Jacoby, 1896, syntype (BMNH). 28. *Monolepta basalis* Jacoby, 1884, lectotype, ♀ (RMNH).

Type material. *Monolepta basalis*. Lectotype: ♀, “Ma Loe II.77 / *Monolepta basalis* Jac.” (RMNH; (Fig. 27). Paralectotypes: 4 ex., same data as lectotype (RMNH), 1 ex., “Ma Loe, 10.77” (RMNH), 1 ex., Spjg II.77 (RMNH), 1 ex., “Ma Loe II.77 / Sumatra Exped. / 1st Jacoby Coll. / Type 18461” (MCZH). A lectotype is herein designated to fix the name on a single specimen since Jacoby gave no details on specimen numbers in his original publication.

Candezea mentaweiensis. Syntypes: “Mentawai Sipora Sereinu V-VI, 94 Modigliani / Museo Civ. Genova / *Candezea mentaweiensis* Jac. / Jacoby Coll. 1909-28a / Co-type” (BMNH; Fig. 28). A further syntype with the same data is in MCGD. Type locality: 2°10' S/99°41' E.

Further material examined. – **Brunei.** 1 ex., Labi, Bukit Teraja, 4°18' N/114°26' E, 60 m, 23.VIII.79, S. L. Sutton (BMNH). – **Indonesia.** 1 ex., Sumatra Exped., Jacoby Coll. 1909-28a (BMNH); 1 ex., Sumatra, Manna, 4°27' S/102°59' E, M. Knappertt., Coll. Vett (RMNH); 1 ex., N. O. Sumatra, Tandjong Morawa, Serdang, 0°35' S/101°18' E, Dr. B. Hagen (BMNH); 7 ex., Sumatra, Moera Laboe, XI.1877 (RMNH); 4 ex., Borneo, Mt. Tibang, Mjoberg (NHRS); 1 ex., East Borneo, Sanga Sanga, 0°38' S/117°12' E, 1907-203, H. D. Jansen (BMNH); 1 ex., Sumatra, Moera Laboe, X.1877 (RMNH); 1 ex., Sarawak, Kapit distr., Sebong, 1°33' N/114°17' E, III.1994, J. Horák (CJB). – **Malaysia.** 2 ex., Borneo (BMNH); 7 ex., Perak, 4°48' N/101°09' E, Doherty, Fry Coll. 1905.100, Jacoby Coll. (BMNH); 1 ex., Borneo, Baly Coll. (BMNH); 1 ex., Penang, 5°15' N/100°29' E, (Lamb.), Pascoe Coll. (BMNH); 1 ex., Sarawak, Bidi, 4.II.1909, C. J. Brooks (BMNH); 7 ex., West Sarawak, Mt. Matang, 1°34' N/110°16' E, 16.–30.XII.1913, I.1914, G. E. Bryant (BMNH); 3 ex., W. Sarawak, Lundu, 1°40' N/109°48' E, I.1914, G. E. Bryant (BMNH); 1 ex., Malay Penin, Selangor-Pahang, 2700 ft., 3°30' N/101°31' E, I.1915, ex. F. M. S. (BMNH); 3 ex., Malay Penin. Kedah nr Jitra, catchment area, 6°15' N/100°25' E, 4.–7.IV.1928, H. M. Pendlebury (BMNH); 1 ex., Malay Penin, Pahang, F. M. S., Fraser Hills, 4200 ft., 3°42' N/101°41' E, 11.IX.1931, H. M. Pendlebury (BMNH); 1 ex., Sarawak, Matang, 1°34' N/110°17' E, 10.V.1909, C. J. Brooks (BMNH); 1 ex., Kuala Lumpur, Gardens, 3°08' N/101°41' E, 18.XII.1938, H. M. Pendlebury (BMNH); 1 ex., Langkawi Island, 6°21' N/99°49' E, 30.IV.1928 (BMNH);

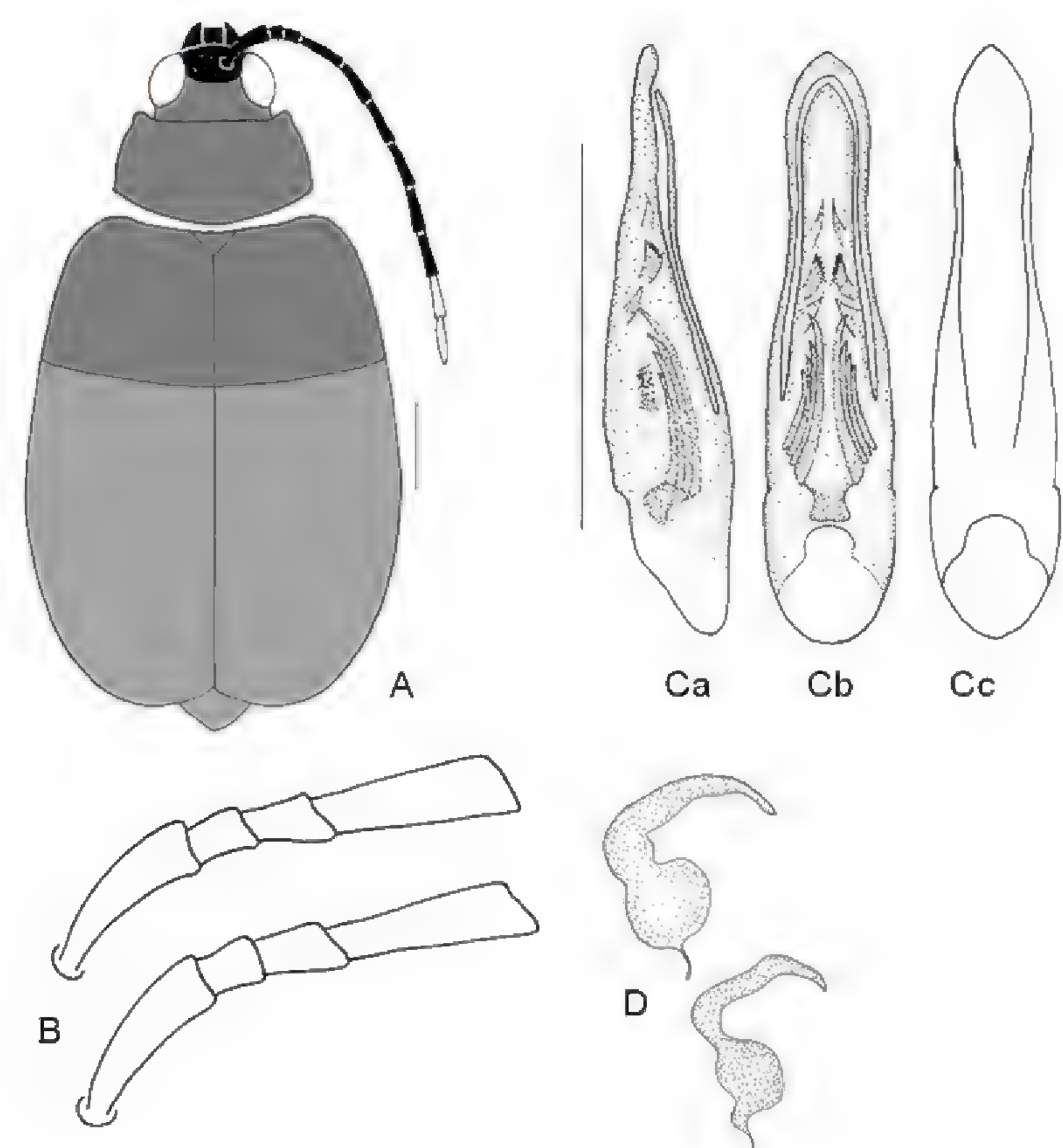


Fig. 29. *Monolepta mentaweiensis* (Jacoby, 1896). A. Colour pattern. B. Basal antennomeres. C. Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. D. Spermathecae. E. Bursa-sclerites, a. dorsal, b. ventral.

1 ex., Selangor, Bukit Kutu, 3500 ft., 3°33' N/101°43' E, 18.III.1931, H. M. Pendlebury (BMNH); 2 ex., Perak, F. M. S. Larut Hills, 3700 ft., 5°01' E/100°53' E, 14.II.1932, H. M. Pendlebury (BMNH); 1 ex., Pahang, Taman Negara, 3°58' N/102°26' E, 1.–13.III.1984, L. Jessop (BMNH); 1 ex., Sabah, Poring, 6°02' N/116°42' E, 6.XI.1986, F. Abang (UKM); 1 ex., Sabah, nr Danum Valley Field, 5°25' N/118°23' E, 20.VI.–12.VII.1987, C. v. Achtherberg & D. Kennedy (RMNH); 1 ex., Kedah, Langkawi, Lubuk Sembilang, 6°21' N/99°48' E, 7.IV.1993, Ismail, Sham, Yusof (UKM); 1 ex., Perak, Temenggor, Ekspedisi MNS-Belum, 5°33' N/101°20' E, 29.XI.1993, Ismail, Yusof, Bidi & Saiful (UKM); 1 ex., Perlis, Wang Kelian, 6°40' N/100°11' E, 19.VII.1994, Salleh, Ismail & Ruslan (UKM); 3 ex., Terengganu, Setiu, H. Lipur Peladang, 5°27' N/102°45' E, V.1994, Ismail & Zabidi (UKM); 1 ex., Kedah, Pulau Langkawi, Gunung Raya, 933 m, 6°21' N/99°48' E, 21.V.1995, Ismail, Ruslan & Sham (UKM); 6 ex., Sabah, Danum Valley, 5°25' N/118°23' E, 6.–15.V.2007, 11.IX.2007, 11.IX.2007, B. H. Izfa (UKM); 5 ex., Sabah, Lembah Danum, 5°25' N/118°23' E, 16.–19.V.1991, 27.–31.VIII.1991, 3.–5.XII.1991, 22.–25.VIII.1992, 6.V.2007, Ismail et al. (UKM); – **Singapore**. 2 ex., Singapore, 1°21' N/103°49' E, 97–109, H. N. Ridley (BMNH); 1 ex., Singapore, H. N. Ridley (BMNH). – **Thailand**. 1 ex., Siam, Renong, 13°45' N/100°29' E, Doherty, Fry Coll. (BMNH); 2 ex., Nakon Sri Tamarat, Khao Ram, 1500–2900 ft., 17°01' N/99°49' E, 28.II.1922, H. M. Pendlebury (BMNH); 1 ex., Phang-nga Prov., 5 km S Kao Lak, 8°36' N/98°15' E, VIII.2014, A. Skale (NME). – **Vietnam**. 3 ex., Na Hang, 160 km, NNW Hanoi, 22°16' N/105°17' E, 200 m, VI.1996, A. Napolov (NME).

Redescription

Total length. 4.90–6.25 mm (mean 5.91 mm, $n = 10$).

Head. Very finely punctuated, brown-reddish and frons partly black. Labrum and mandible black. Antenna slender, extending almost to half of the elytra, rarely either entirely yellowish, and than often with brownish parts in middle of antennomeres (Fig. 28b), or brownish or black with two apical yellowish antennomeres (Fig. 29A). Third antennomere slightly longer than second; ratio length of second to third antennomere 0.75–1.00 (mean 0.80); ratio length of third to fourth antennomere 0.38–0.50 (mean 0.42; Fig. 29B).

Thorax. Pronotum finely punctuated, entirely reddish-brown and posterior sides rounded and basally widened. Pronotal width 1.60–2.00 mm (mean 1.84 mm), ratio length to width 0.53–0.57 (mean 0.55). Scutellum, meso- and metathorax reddish-brown. Elytron distinctly widened behind, yellow to reddish-brown and in most specimens darker brownish-red in the basal third (Figs 27b, 29A). Elytral length 3.90–5.00 mm (mean 4.68 mm), maximal width of both elytra together 2.80–3.70 mm (mean 3.49 mm), ratio of maximal width of

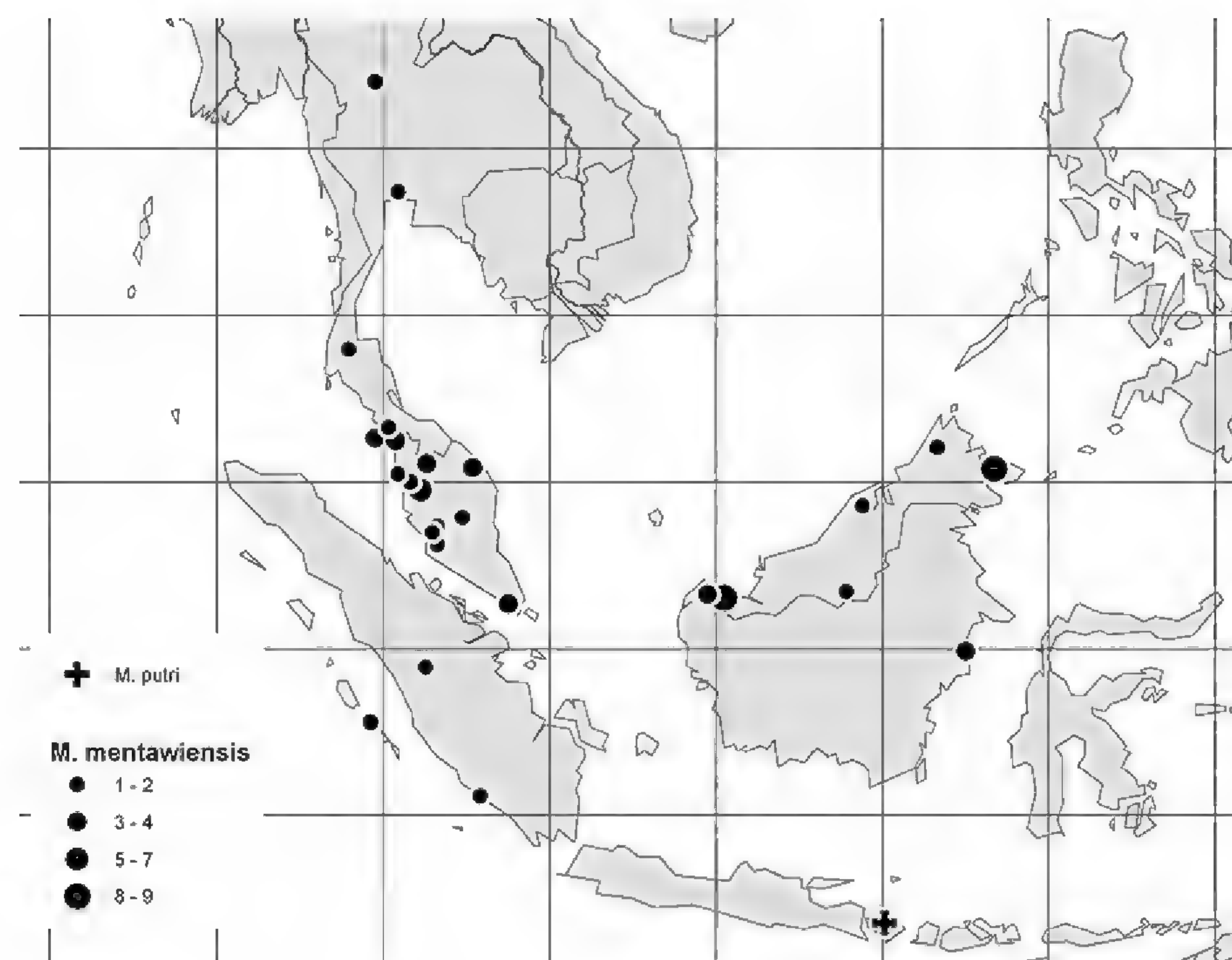


Fig. 30. Distribution of *Monolepta mentaweiensis* (Jacoby, 1896) and *M. putri* Mohamedsaid, 2001.

both elytra together to length of elytron 0.70–0.78 (mean 0.74). Legs brown-reddish.

Abdomen. Yellow, contrasting paler to the more brownish metathorax.

Male genitalia. Median lobe broad at base and more slender in the apical half (Fig. 29C). Median spiculae comparatively short and slender, three lateral spiculae as short broad spines or brush-like structures, ventral spiculae very small and weakly sclerotised (Figs 29Ca, Cb).

Female genitalia. Spermatheca with large spherical nodulus, middle part and cornu short and broad (Fig. 29D). Bursa sclerites weakly sclerotised (Fig. 29E).

Diagnosis. In colouration, *Monolepta mentaweiensis* is most similar to *M. bruneiensis* sp. nov., both species have a slight contrast between the brown-reddish pronotum the paler elytra. In most cases, *M. mentaweiensis* possesses a brown-reddish elytral base that does not occur in *M. bruneiensis* sp. *Monolepta mentaweiensis* (4.90–6.25 mm) is much larger than *M. bruneiensis* sp. nov. (3.75–4.70 mm). The frons and mouthpart are partly black in *M. mentaweiensis* while in *M. bruneiensis*, it is brown-reddish as the head. The genitalic characters are quite different between these two species (Figs 29C–E, 44 C–E).

Distribution. Northern Vietnam to Thailand through Malay Peninsula towards Sumatra and Borneo (Fig. 30).

Monolepta militaris Jacoby, 1896

Figs 31–33

Monolepta militaris Jacoby, 1896: 484.

Type material. Syntypes: “Sumatra Si-Rambe, XII.90–III.91, E. Modigliani / *Monolepta militaris* Jac. / Jacoby Coll. 1909–28a / Type” (BMNH; Fig. 31). Further 5 syntypes (3 ex. BMNH, at least 1 ex. MCGD, 1 ex. MCZH) with the same data. Type locality: 5°24' S/105°17' E.

Further material examined. – **India.** 1 ex., India, occ. Centr. GOA prov, 15°47' N/74°02' E, 12.–14.VIII.2002,

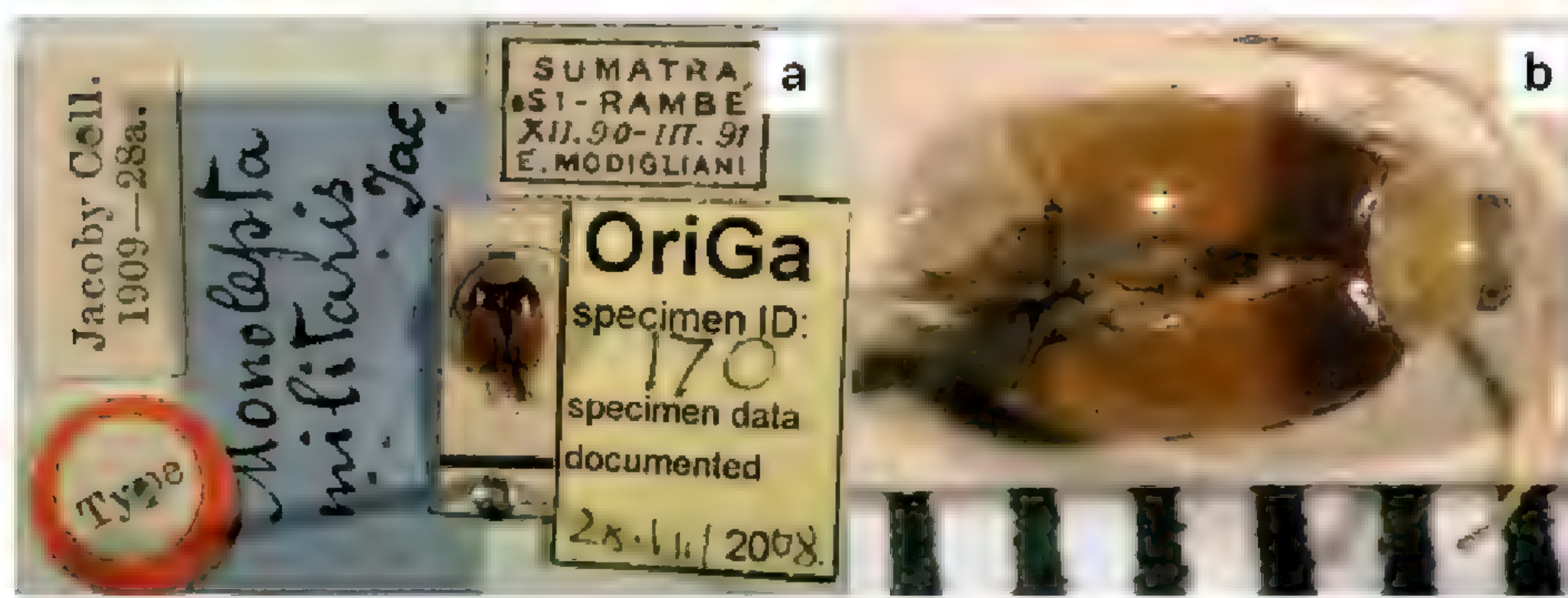


Fig. 31. Type material of *Monolepta militaris* Jacoby, 1896, syntype (BMNH).

P. Sipek & M. Fikacek (CJB). – **Indonesia.** 4 ex., Sumatra, Singalang, Sibajakvulkan, 0°25' S/100°20' E, Mjoberg (NHRS); 4 ex., N. Sumatra, Bivouac two Mt. Bandahara, 3°45' N/97°45' E, 5.–10.VII.1972, J. Krikken (RMNH). – **Malaysia.** 1 ex., N. Sembilan, Gemencheh, 2°35' N/102°24' E, 5.VIII.1990, Mahbob, Fog Perigen (UKM).

Redescription

Total length. 3.70–5.40 mm (mean 4.55 mm; $n = 10$).

Head. Very finely punctuated, entirely yellowish-brown to black. Labrum and mandible black. Antenna slender, extending to the middle of the elytra, yellowish and usually two terminal antennomeres brownish (Fig. 32A), sometimes also middle of antenna brownish. Third antennomere slightly longer than second; ratio length of second to third antennomere 0.75–1.00 (mean 0.88); ratio length of third to fourth antennomere 0.33–0.50 (mean 0.41; Fig. 32B).

Thorax. Pronotum finely punctuated, entirely yellow. Pronotal width 1.20–1.60 mm (mean 1.34 mm),

ratio length to width 0.65–0.67 (mean 0.66). Scutellum, meso- and metathorax black. Elytron pale brownish-red, black transverse band in the basal third. Elytral length 3.00–4.10 mm (mean 3.56 mm), maximal width of both elytra together 2.30–2.75 mm (mean 2.66 mm), ratio of maximal width of both elytra together to length of elytron 0.73–0.77 (mean 0.75; Figs 31b, 32A). Legs yellow, often hindfemur, rarely additionally mid femur blackish without the distal tip.

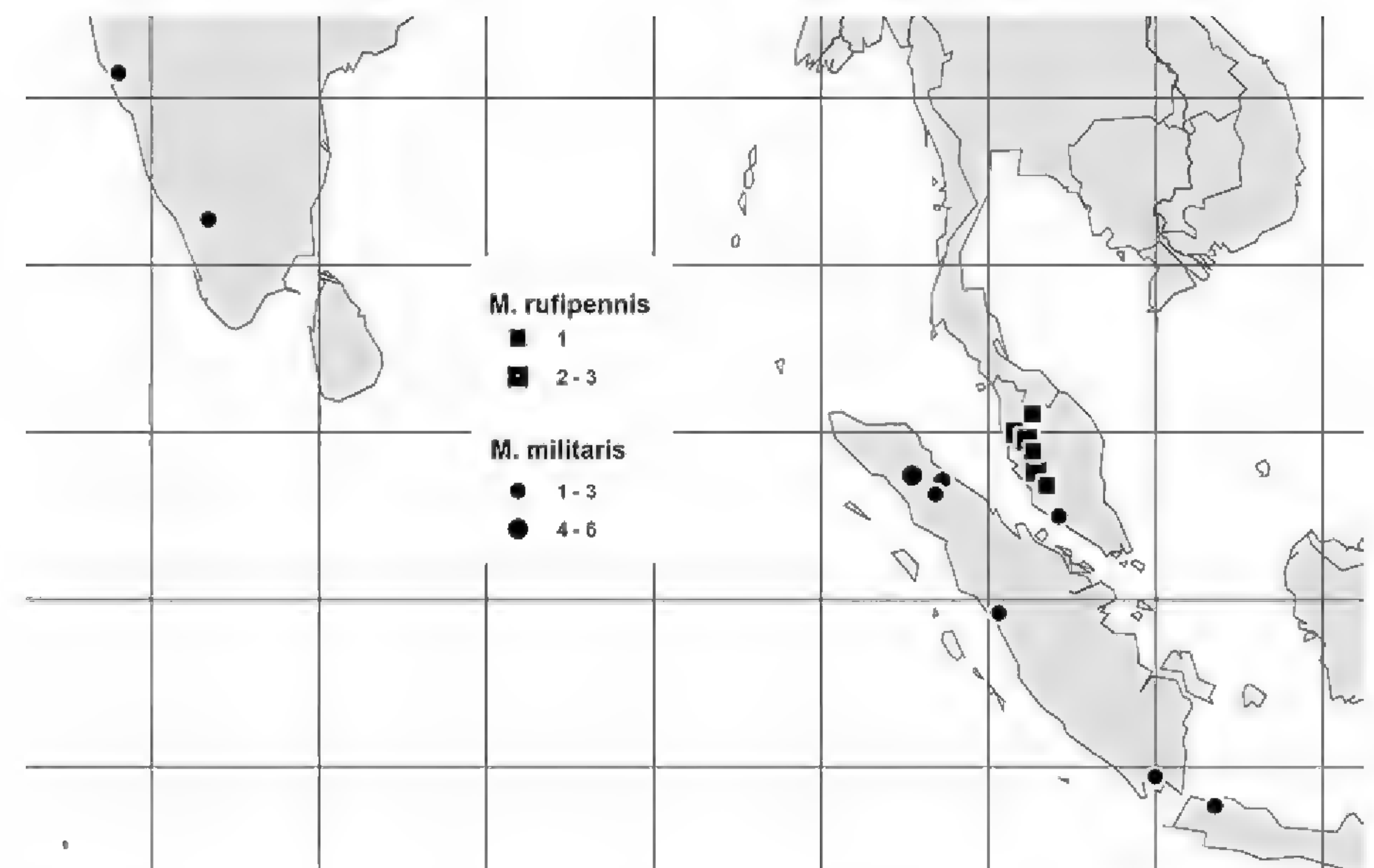


Fig. 33. Distribution of *Monolepta militaris* Jacoby, 1896, and *Monolepta rufipennis* Jacoby, 1899.

Abdomen. Yellowish-brown, strongly contrasting to the dark metathorax.

Male genitalia. Median lobe long and slender. Parallel-sided and slightly conical towards apex, twisted before apex (Figs 32Ca, Cc). Median spiculae short and brush-like structures at base and one pair of long, broad spines, lateral spiculae long, strong with c-shaped apical part, ventral spiculae jagged-liked with three spines (Figs 32Ca, Cb).

Female genitalia. Spermatheca with comparatively small nodulus and strong ridge, cornu long slender and strongly curved (Fig. 32D). Two pairs of bursa sclerites strongly serrate and roughly of same size (Fig. 32E).

Diagnosis. *Monolepta militaris* is a medium-sized species of *Monolepta* that can be easily distinguished by dorsal colouration. Elytra are brown-reddish, with black transverse band at base, contrasting to a pale yellow pronotum (Fig. 32A). *Monolepta rufipennis* has also reddish elytra, but can be differentiated from *M. militaris* by a transverse band stretch across the basal elytral third (Fig. 37). The median lobe of this species is very different from *M. rufipennis* (Figs 32C, 37C).

Distribution. Known from southern India, Sumatra and Java (Fig. 33).

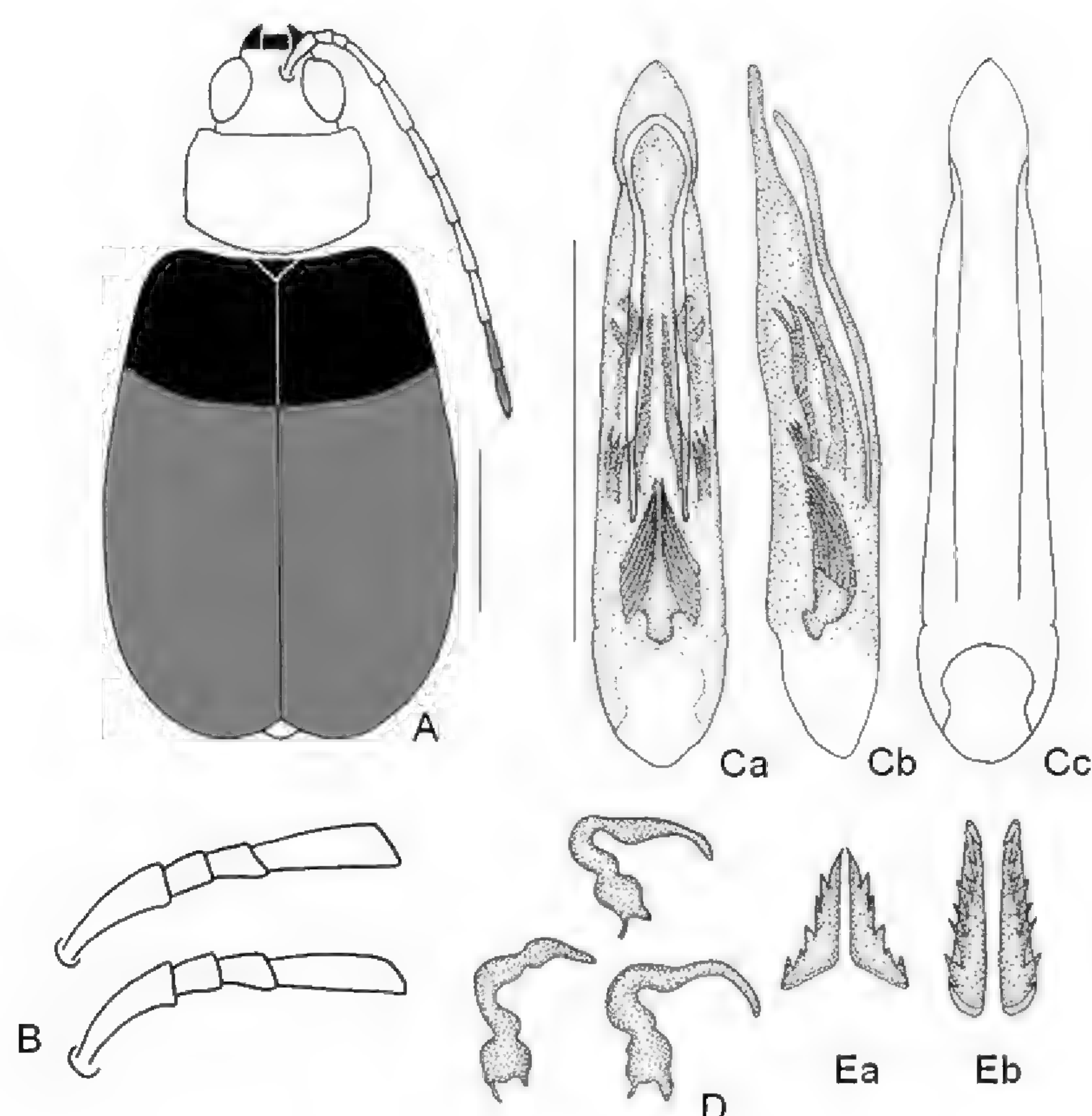


Fig. 32. *Monolepta militaris* Jacoby, 1896. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

***Monolepta marginicollis* Jacoby, 1896**

Figs 9, 34–35

Monolepta marginicollis Jacoby, 1896: 485.

Type material. Syntypes: “Sumatra Si-Rambe, XII.90–III.91, E. Modigliani / *Monolepta marginicollis* Jac. / Museo Civ. Genoa / Jacoby Coll. 1909-28a / Co-type” (BMNH; Fig. 34). One further sytpe with the same data in MCGD. Type locality: 6°11' S/106°48' E.

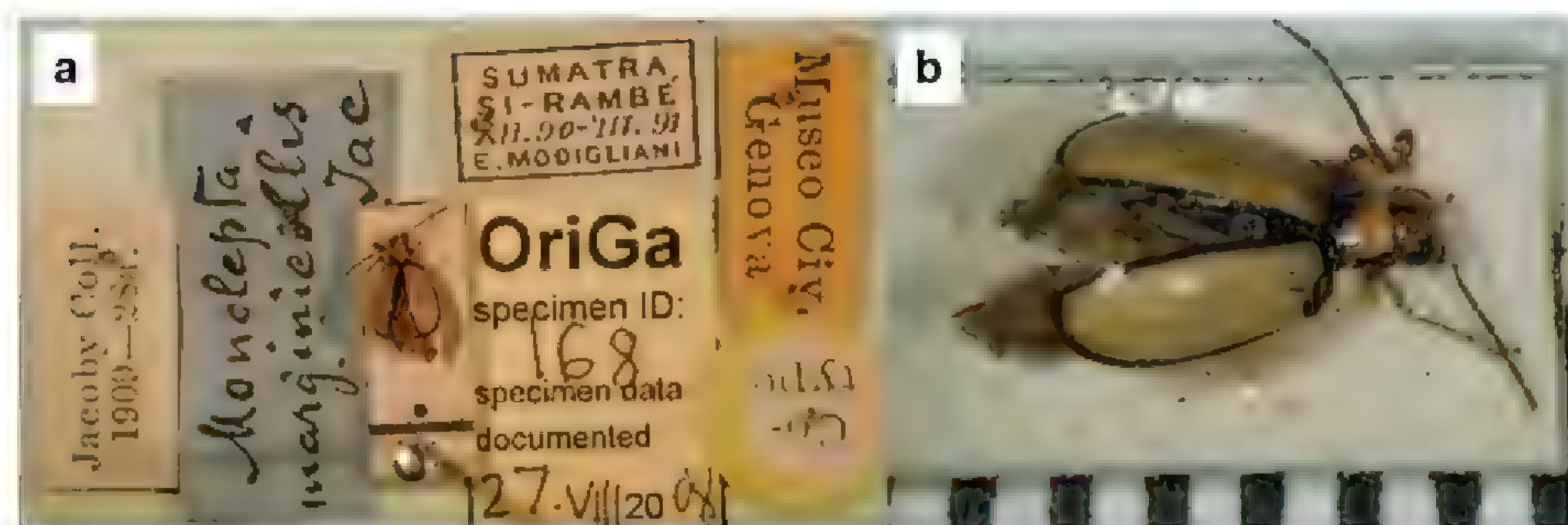


Fig. 34. Type material of *Monolepta marginicollis* Jacoby, 1896, syntype (BMNH).

Further material examined. – **Brunei.** 4 ex., Labi, Bukit Teraja 60 m, Mxt. Dipt. Forest, 4°18' N/114°26' E, 21.VIII.1979, B.M. 1983-39, Light trap, 1.75 m above ground, S. L. Sutton (BMNH); 7 ex., Bukit Sulang nr Lamunin, 4°39' N/114°44' E, 20.VIII.–10.IX.1982, NE Stork (BMNH); 1 ex., Kuala Belalong FSC, Dipterocarp Forest, 4°29' N/115°11' E, 16.VI.1991, N Mawdsley (BMNH); 2 ex., Temburung District Ridge, NE of Kuala Belalong, 4°37' N/115°8' E, 300 m, X.1992, Light Trap, J. H. Martin (BMNH). – **Indonesia.** 1 ex., N Sumatra, Bivouac Two, Mt Bandahara, 3°44' N/97°43' E, 5.–10.VII.1972, J. Krikken (RMNH). – **Malaysia.** 3 ex., Borneo, Mt. Tibang, 1700 m, Mjoberg (NHRS); 3 ex., Mt. Matang, West Sarawak, XII.1913–II.1916, G. E. Bryant (BMNH); 1 ex., Malay Penin, Kedah Peak, 16.III.1928 (BMNH); 1 ex., Sarawak, Engkelili, 1°8' N/111°39' E, 27.VIII.1967, Vincent Coll. (BMNH); 3 ex., Sarawak, Gunong Mulu Nat. Park, 3°55' N/114°47' E, R. G. S. Exped. 24.VI.1977, J. D. Holloway et al. (BMNH); 11 ex., Sabah, Tawau Plat. 1300 ft., 8 m S. Telupid, 5°35' N/117°07' E, 8.IX.1977, M. E. Bacchus (BMNH); 19 ex., Sarawak, 4th Division Gn. Mulu NP, nr. Base Camp 50–100 m, 3°55' N/114°46' E, V.–VIII.1978, P. M. Hammond & J. E. Marshall (BMNH); 1 ex., Malaysia-SW, Sabah nr Long Pa Sia (west), 5°20' N/117°10' E, 1200 m, 2.–14.IV.1987, C. v. Achterberg (RMNH); 2 ex., Malaysia, SE Sabah nr Danum Valley Field C, 5°25' N/118°23' E, 15.–25.III.1987, C. v. Achterberg & D. Kennedy (RMNH); 1 ex., N. Borneo, Sabah, 60 km of Lahad Datu DVFC, EO sg. Segama, 4°58' N/117°48' E, 18.X.1987, J. Huisman & R. de Jong (RMNH); 1 ex., Sabah, Sandakan, Sepilok FR (obs tower), 5°51' N/118°0' E, 1.XI.1987, Krikken & Rombaut (RMNH); 1 ex., Pahang, Kuala Lompat, 3°41' N/102°11' E, 27.VIII.1990,

Fog Malathion, Mahbob (UKM); 1 ex., Sabah, Lembah Danum, 5°25' N/118°23' E, 3.–5.XII.1991, Zaidi et al. (UKM); 1 ex., N. Borneo, Trus Madi, 5°43' N/116°25' E, 11.IV.1993, H. Karube (CTJ); 1 ex., Sarawak, Lundu, T. Negara Gunung Gading, 1°44' N/109°50' E, 22.–27.IV.1994, Salleh dan Ismail (UKM); 1 ex., W. Perak, 25 km NE Ipoh, Banjaran Titiwangsa Mts. Korbu, 4°41' N/101°18' E, 6.–12.V.2001, M. Riha (CJB).

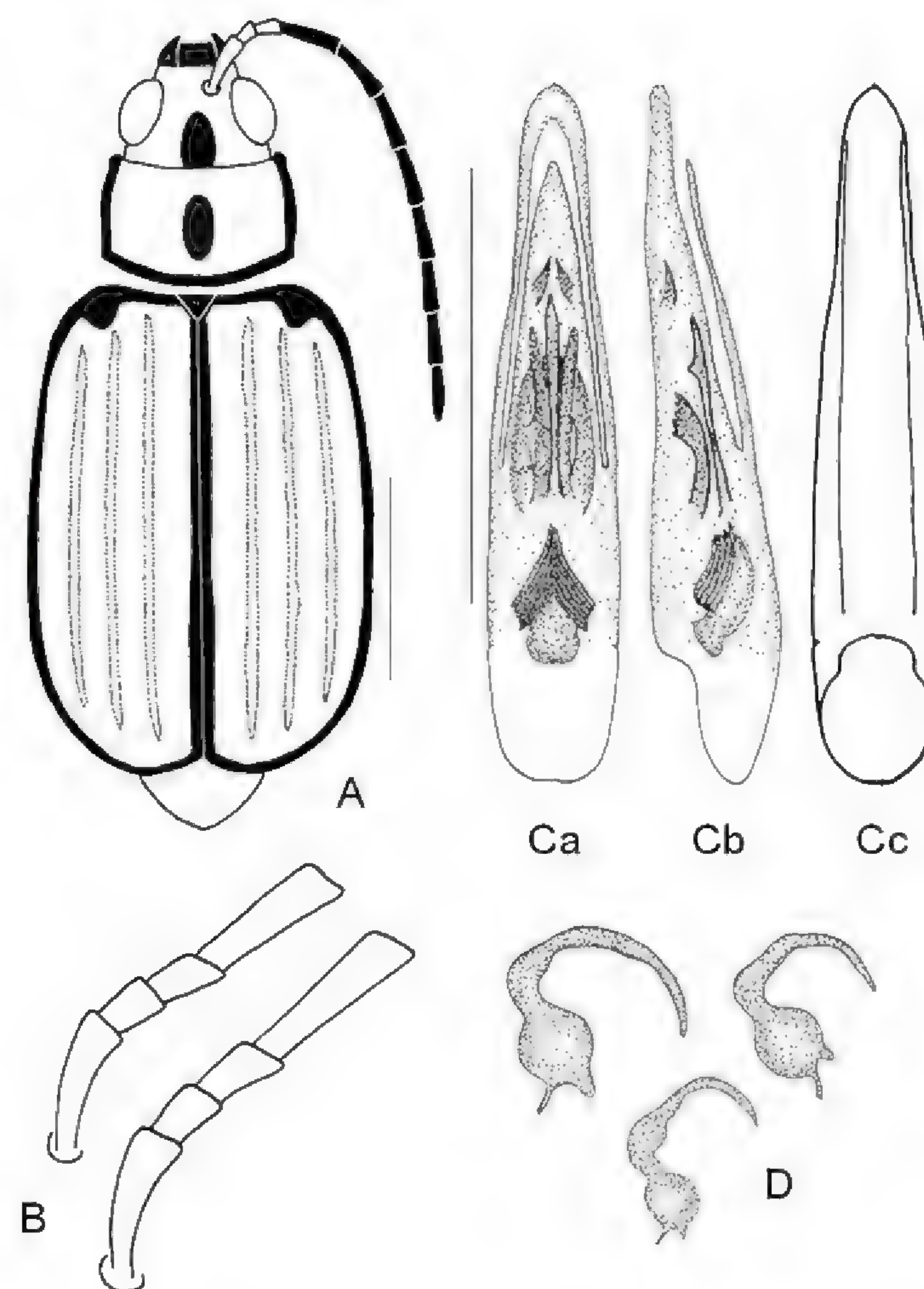


Fig. 35. *Monolepta marginicollis* Jacoby, 1896. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae.

Redescription

Total length. 3.25–4.00 mm (mean 3.55 mm, n = 10).

Head. Very finely punctuated, yellowish to reddish-brown, vertex often with short median black stripe. Labrum and mandible black. Antenna slender, extending almost to the middle of elytra, blackish, and three basal antennomeres yellow-brownish (Fig. 35A). Third antennomere significantly longer than second; ratio length of second to third antennomere 0.67–0.75 (mean 0.73); ratio length of third to fourth antennomere 0.43–0.67 (mean 0.62) (Fig. 35B).

Thorax. Pronotum finely punctuated, yellow to brownish-yellow, lateral and basal margin black (Figs 34b, 35A). Pronotal width 1.00–1.20 mm (mean 1.06 mm), ratio length to width 0.60–0.64 (mean 0.62). Scutellum, meso- and metathorax blackish. Elytron finely punctuated, yellowish, all margins, including suture, black. Elytral length 2.45–2.85 mm (mean 2.68 mm), maximal width of both elytra together 1.80–2.10 mm (mean 1.96 mm), ra-

ratio of maximal width of both elytra together to length of elytron 0.71–0.74 (mean 0.73). Legs entirely yellowish.

Abdomen. Yellowish, strongly contrasting to the black metathorax.

Male genitalia. Median lobe slender, parallel-sided, conical in the apical third. Tectum pointed. Median spiculae three broad spines, further brush-like structures at sacculus (Figs 35Ca, Cb), lateral spiculae short spurs close to apex, ventral spiculae as two fattened, spiny structures (Figs 35Ca, Cb).

Female genitalia. Spermatheca with spherical comparatively big nodulus and small ridge. Cornu very long and curved (Fig. 35D). Bursa sclerite very weakly sclerotised and hardly visible.

Diagnosis. Most similar to *M. marginicollis* sp. nov. on the first glance. Both species have yellow elytra with a slightly stripy appearance and narrow black outer elytral margins and suture in common (Figs 34A, 52b). Antennomeres in both species are blackish and only three basal antennomeres yellowish. *Monolepta marginicollis* is on average smaller (3.25–4.00 mm) than *M. marginicollis* sp. nov. (3.70–5.10 mm). Other characters to differentiate these two species are the yellow-brownish head and vertex with short central black stripe in *M. marginicollis*, while head in *M. marginicollis* sp. nov. is completely black. The genitalic characters are very different, and allow a clear differentiation of both species in any doubtful cases (Figs 34C, D, 53C–E).

Distribution. Known from Sumatra, Malayan Peninsula and Borneo (Fig. 9).

Monolepta rufipennis Jacoby, 1899
Figs 33, 36–37

Monolepta rufipennis Jacoby, 1899: 325.

Type material. Lectotype: “Perak / *Monolepta rufipennis* Jac. / Jacoby Coll. 1909-28a / Type” (BMNH; Fig. 36). Type locality: 4°48'N/101°09'E. Jacoby mentioned two localities in his original publication and thus we designate a lectotype herein to fix the name on a single specimen.

Further material examined. – **Malaysia.** 2 ex., Perak, Doherty, 4°48' N/101°09' E, Fry Coll. 1905.100 (BMNH); 2 ex., Perak, F. M. S. Larut Hills, 3700 ft., 5°N/100°53' E, VIII.1908; 14.II.1932, H. M. Pendle-

bury (BMNH); 1 ex., Malay Penin, Selangor, Gombak Valley, 3°25' N/101°47' E, 11.X.1921, H. M. Pendlebury (BMNH); 3 ex., Perak, F. M. S. Batang Padang Jor Camp, 3°54' N/101°26' E, 31.V.–5.VI.1923, H. M. Pendlebury (BMNH); 1 ex., Pahang, F. M. S. Cameron's Highlands, 4000–4500 ft., 4°27' N/101°22' E, 15.VI.1935, H. M. Pendlebury (BMNH); 1 ex., Perak, Temenggor, Ekspedisi MNS-Belum, 5°35' N/101°21' E, 10.–15.V.1994, Ismail & Sham (UKM).

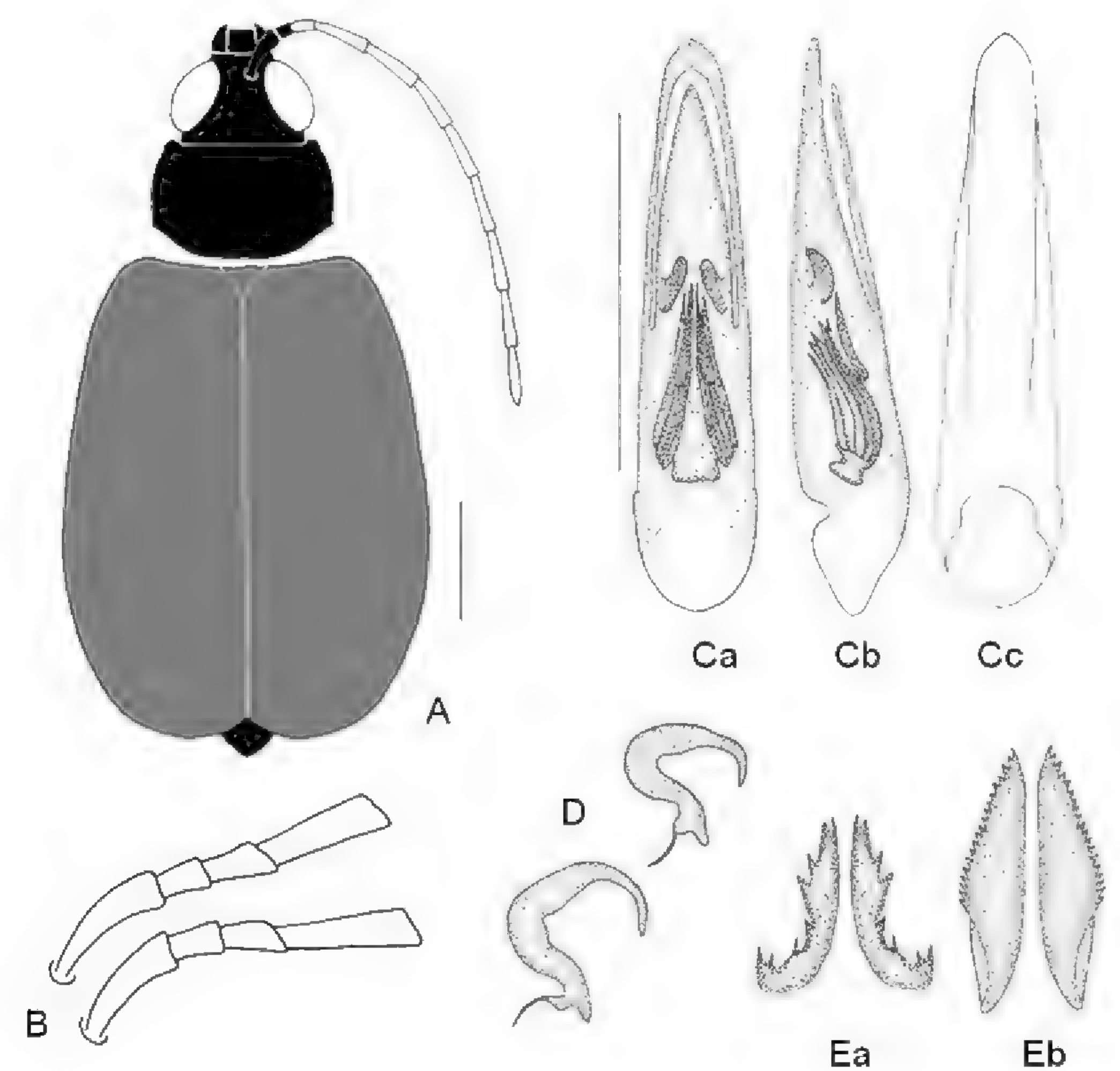


Fig. 37. *Monolepta rufipennis* Jacoby, 1899. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

Redescription

Total length. 4.75–6.35 mm (mean 5.61 mm; n = 10).

Head. Very finely punctuated, entirely black. Antenna slender, extending beyond the middle of elytra, pale yellow yellowish-brown, two basal antennomeres black (Fig. 37A). Third antennomere slightly longer than second; ratio length of second to third antennomere 0.80–0.83 (mean 0.81); ratio length of third to fourth antennomere 0.46–0.50 (mean 0.48; Fig. 37B).

Thorax. Pronotum very finely punctuated, entirely black, shiny, surface rather convex. Pronotal width 1.35–1.90 mm (mean 1.64 mm), ratio length to width 0.61–0.64 (mean 0.62). Scutellum brown reddish. Meso- and metathorax black. Elytron entirely reddish-brown (in living specimens most likely carmine red), dense and finely punctuated, widened posteriorly. Elytron length 4.30–5.05 mm (mean 4.57 mm), maximal width of both elytra together 3.20–3.70 mm (mean 3.39 mm), ratio of maximal width of both elytra together to length of elytron 0.73–0.75 (mean 0.74; Fig. 54). Legs entirely brownish-red to blackish, distal part of femora paler.

Abdomen. Blackish.

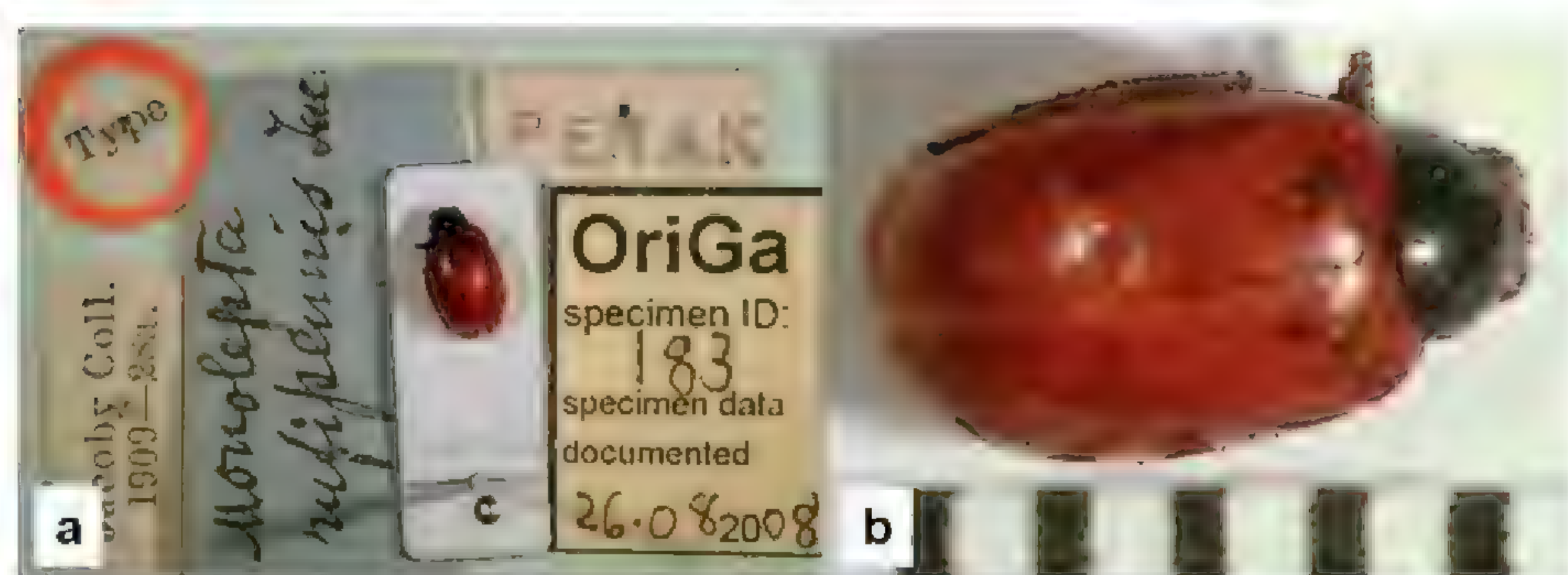


Fig. 36. Type material of *Monolepta rufipennis* Jacoby, 1899, lectotype (BMNH).

Male genitalia. Median lobe lanceolate, broad, becomes continuously narrow towards apex. Tectum pointed. Median spiculae long and slender, one pair shorter and stronger (Figs 37Ca, Cb), lateral spiculae, short, broad, lobe-like, ventral spiculae weakly sclerotised and not clearly visibly.

Female genitalia. Nodulus reduced, middle part and especially cornu long and curved (Fig. 37D). Bursa sclerites large, of two different types, the dorsal one with strong spines (Fig 37Ea).

Diagnosis. *Monolepta rufipennis* can be distinguished from others *Monolepta* species by the black pronotum and head contrasting to the reddish-brown elytra. Concerning body size and dark dorsal colouration and brownish-reddish elytra it is most similar to *M. rubra*. Both species are presumably closely related and form – next to some others – a distinctive clade within the Oriental species of *Monolepta* characterized by a lanceolate median lobe with simple brush-like median spiculae, lobed lateral spiculae and the lack of ventral spiculae (Figs 8C, 37C), and spermathecae possessing extremely reduced nodulus (Figs 8D, 37D), and two large, and strongly different pairs of bursa sclerites (Figs 8E, 37E). Both species can be in doubtful cases differentiated by this fine but constant genitalic differences, furthermore, is their distribution allopatric (Figs 9, 33).

Distribution. This species is only known from the Malay Peninsula (Fig. 33).

***Monolepta tiomanensis* Mohamedsaid, 1999**
Figs 38–40

Monolepta tiomanensis Mohamedsaid, 1999: 247.

Type material. Holotype: “Pahang, Pulau Tioman, 6-9 Jun 1990, Zaidi, Ismail, Ruslan / Holotype *Monolepta tiomanensis* n. sp. Mohammedsaid 1997” (UKM; Fig. 38). – Paratypes. 2 ex., same data as holotype (UKM). Type locality: 2°47' N/104°10' E.

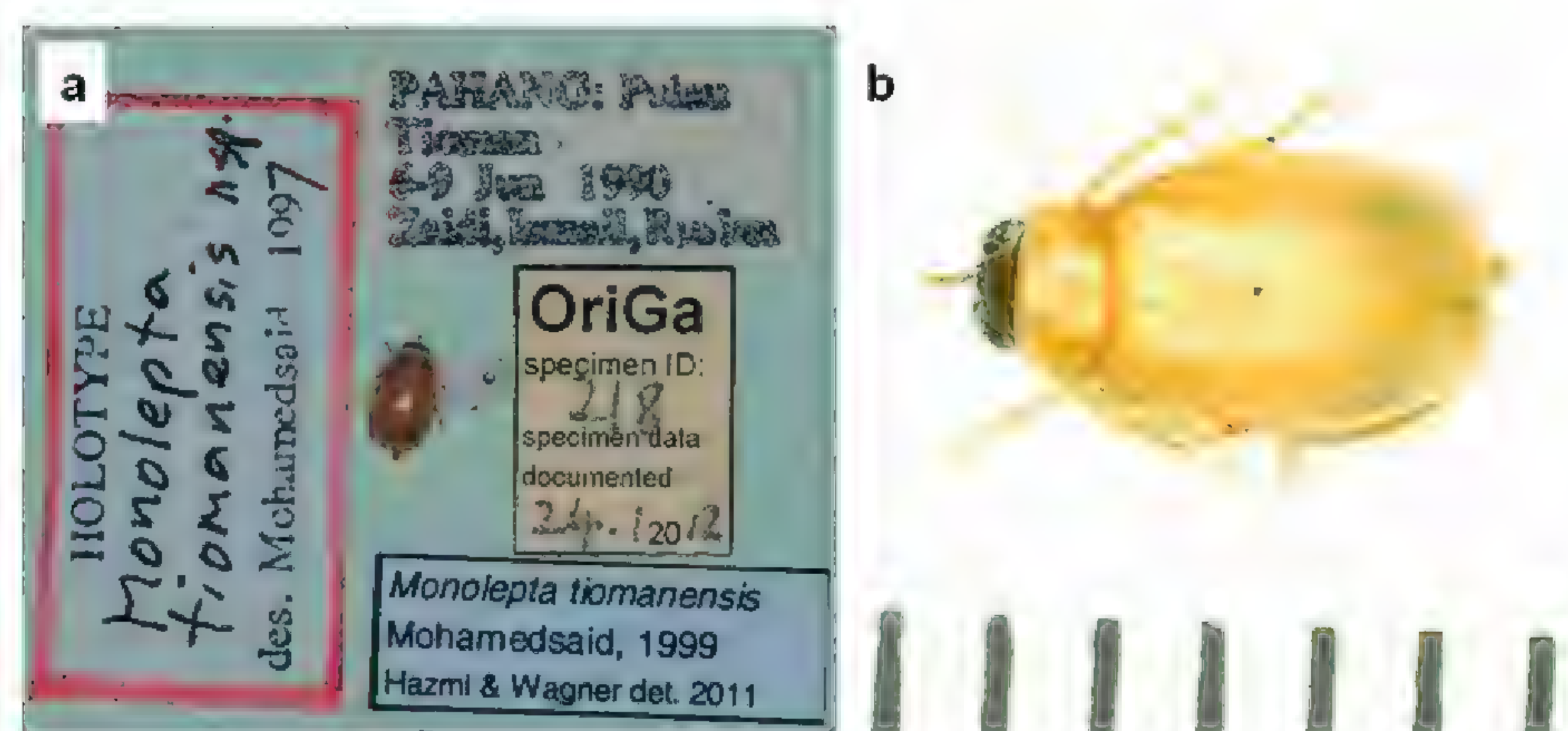


Fig. 38. Type material of *Monolepta tiomanensis* Mohamedsaid, 1999, holotype (UKM).

Further material examined. – **Brunei.** 1 ex., Temburong District, ridge NE of Kuala Belalong,

4°37' N/115°8' E, 300 m, X.1992 (BMNH). – **Indonesia.** 1 ex., Sibolangit, Sumatra, 3°18' N/98°34' E, Mjöberg (NHRS); 1 ex., Java, Gg. Moeria, Tjolo 700–1000 m, 7°36' S/110°42' E, 28.XII.1973, P. H. v. Doesburg Collectie Van Doesburg (RMNH); 1 ex., Sumatra Utara, Pasar Baru, 0°35' S/101°20' E, 26.III.1996, K. Maruyama (CTJ). – **Malaysia.** 1 ex., South China Sea, Pulau Tioman, Sedang at light, 2°47' N/104°10' E, V.1927, N.S.M.R.H (BMNH); 2 ex., Perlis, Kaki Bukit, Wang Kelian, 6°40' N/100° E, 7.XII.1992, 19.VII.1994, Zabidi et al. (UKM); 3 ex., Pahang, Pulau Tioman, 2°47' N/104° E, 22.–28.IV.1993, Zaidi et al. (UKM); 1 ex., N. Sembilan, Serting Ulu, 2°59' N/102°E, 30.III.1995, Ismail & Ruslan (UKM); 3 ex., N. Sembilan, Rembau, Gunong Datok, 2°34' N/102°3' E, 30.VIII.1995, Ismail & Sham (UKM); 1 ex., Sarawak, Mt. Dulit, 4000 ft., 3°20' N/114°9' E, 21.X.1932, Moss Forest (BMNH); 2 ex., Perak, F. M. S. Batang, Padang Jor Camp, 4°48' N/100°48' E, 11.III.1924/1925, H. M. Pendlebury (BMNH). – **Singapore.** 2 ex., Singapore, 1°21' N/103°49' E, H. N. Ridley, 1904/3 (BMNH).

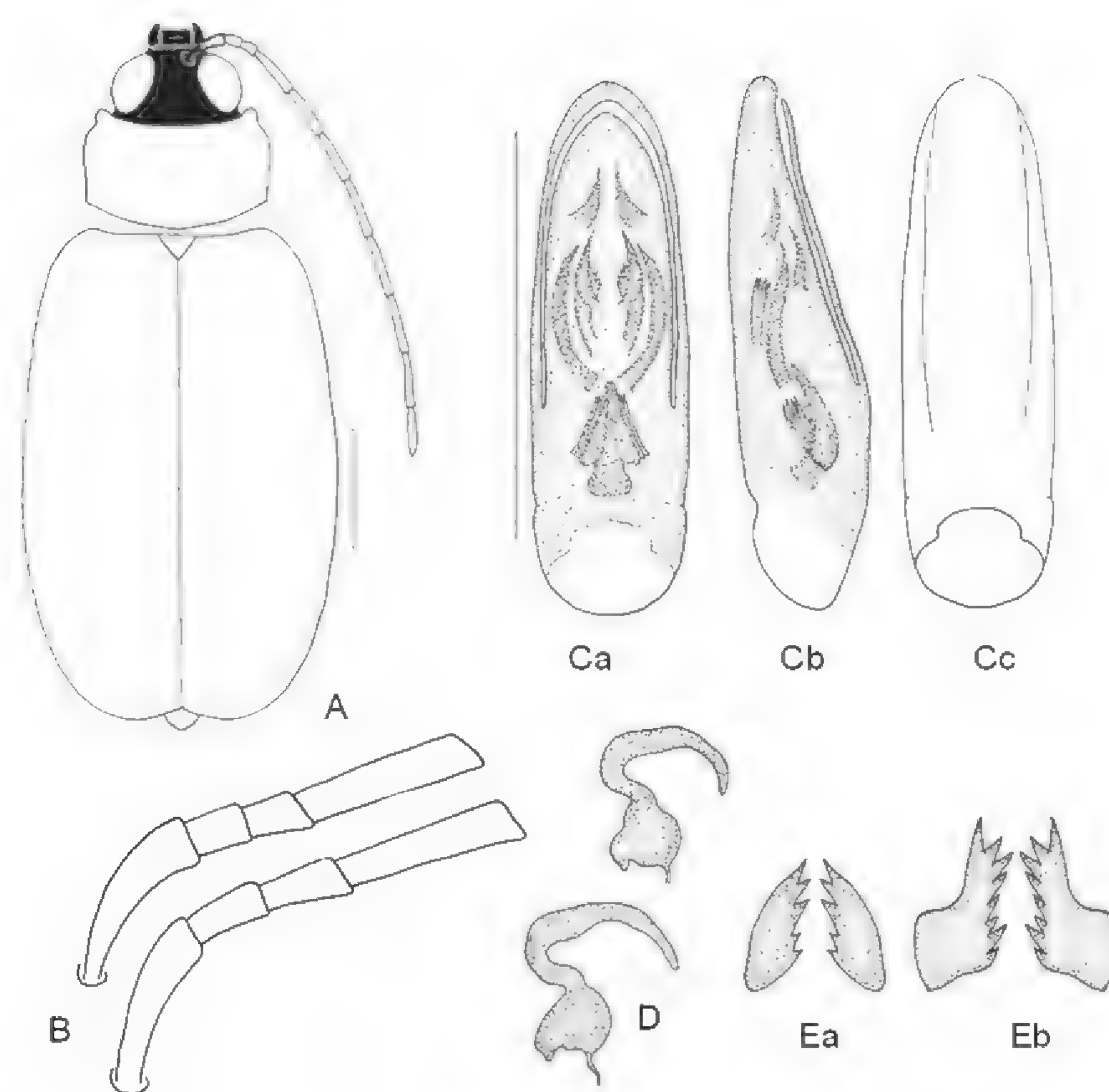


Fig. 39. *Monolepta tiomanensis* Mohamedsaid, 1999. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

Redescription

Total length. 4.75–6.15 mm (mean 5.56 mm; n = 10).

Head. Nearly impunctate, entirely black with very large eyes. Antenna slender, long, extending towards the apical third of elytra, first antennomeres brownish to black at base, second to terminal antennomere yellow (Fig. 39A). Third antennomere slightly longer than second; ratio length of second to third antennomere 0.75–

1.00 (mean 0.88); ratio length of third to fourth antennomere 0.27–0.45 (mean 0.36; Fig. 39B).

Thorax. Pronotum entirely pale yellow, transversely convex, anterior side broadened. Pronotal width 1.40–1.80 mm (mean 1.64 mm), very broad, ratio length to width 0.57–0.61 (mean 0.59). Scutellum, meso- and metathorax yellow. Elytra punctuated like pronotum, yellowish and elongated. Elytral length 3.60–4.50 mm (mean 4.14 mm), maximal width of both elytra together 2.50–3.20 mm (mean 2.83 mm), ratio of maximal width of both elytra together to length of elytron 0.66–0.70 (mean 0.68; Fig. 38). Legs entirely yellowish.

Abdomen. Yellow.

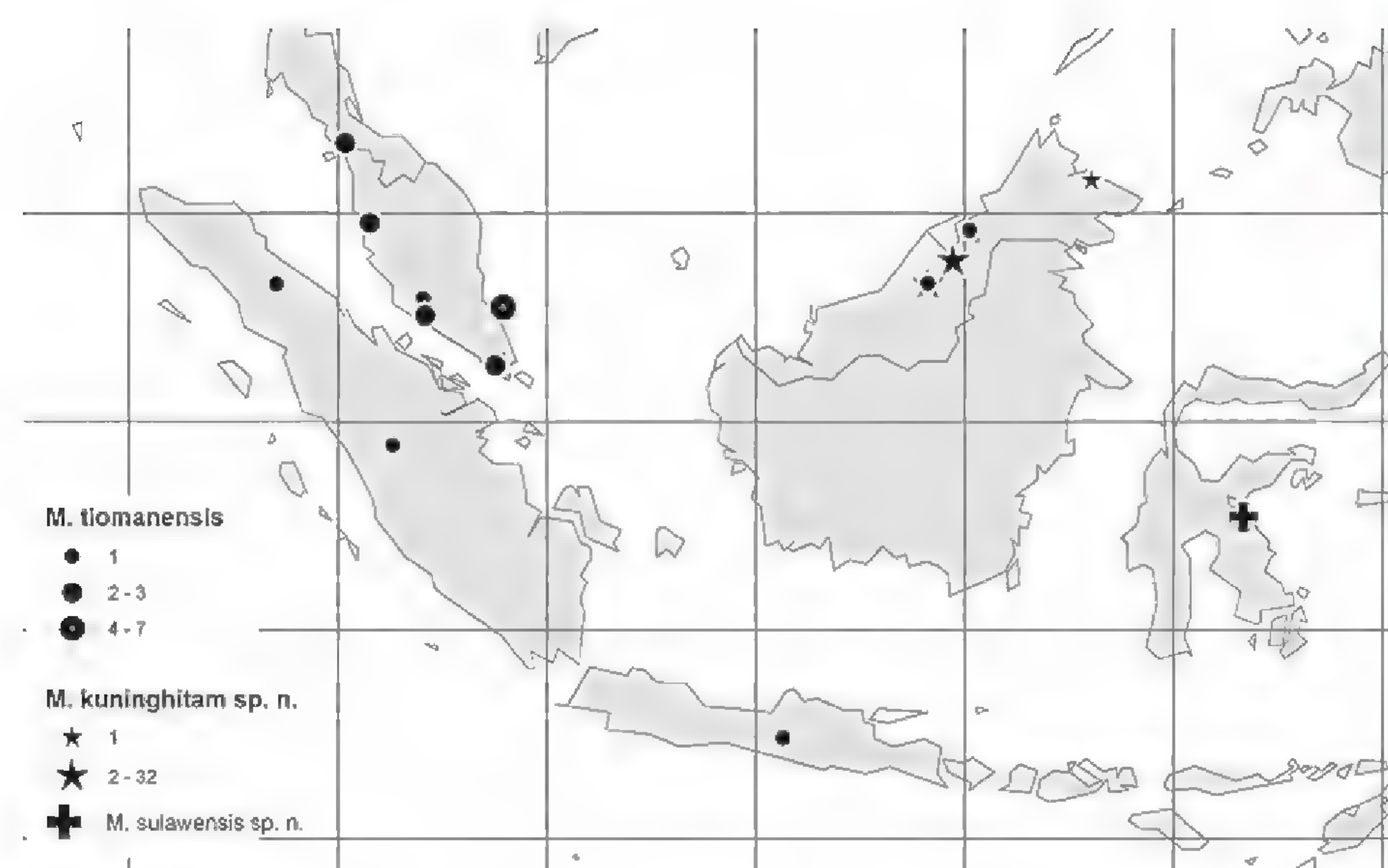


Fig. 40. Distribution of *Monolepta tiomanensis* Mohamedsaid, 1999, *M. kuninghitam* sp. nov., and *M. sulawensis* sp. nov.

Male genitalia. Median lobe short, broad, parallel-sided and rounded at apex. Tectum broad and nearly reaching the apex of median lobe. Median spiculae are strong, long, and horn-shaped, ventral spiculae comb-like, and lateral spiculae spur-like, close to the apex of median lobe (Fig. 39C).

Female genitalia. Spermatheca with large spherical nodule, cornu long and curved (Fig. 39D). Two pairs of bursa sclerites of similar size, both carrying strong spines (Fig. 39E).

Diagnosis. *Monolepta tiomanensis* can be distinguished by the entirely yellowish abdomen and thorax to the contrasting black head. Entirely yellow dorsum is found also in *M. jacobyi*, where head is not black, but the narrow base of elytra. This species is also less slender and has a less broad pronotum than *M. tiomanensis* (Fig. 17A, 39A). There are several other species described in *Monolepta* with throughout yellow colouration and large eyes in the Oriental Region. This pattern is usually correlated with nocturnal activity. But all other species with this general pattern belong not to “true” *Monolepta*; a genital check is senseful in all doubtful cases.

Distribution. Known from Borneo (Malaysia, Brunei) Singapore, Sumatra and Java (Fig. 40).

Monolepta putri Mohamedsaid, 2001

Figs 30, 41–42

Monolepta putri Mohamedsaid, 2001: 137–169.

Type material. Holotype: ♀ “Asah Panji, Lake Tamblingan, C. Bali 6 V 1998, H. Takizawa / Holotype *Monolepta putri* n. sp. des. Mohammedsaid 2000” (CTJ). – Paratypes: 1 ♀, same data as holotype (UKM, Fig. 41); 1 ♀, same data, but 20.IX.1998 (UKM). Type locality: 8°15' S/115°05' E.



Fig. 41. Type material of *Monolepta putri* Mohamedsaid, 2001, paratype (UKM).

Further materials examined. – **Indonesia.** 1 ex., C Bali, Candikuning, Kebun Raya, alt m 1400, 27.–31.X.1991, Krikken, Huijbregts, de Vries, multistr evergr forest (degraded) (RMNH); 1 ex., same data as holotype, but 25.V.2005 (UKM).

Redescription

Total length. 4.60–4.90 mm (mean 4.74 mm; n = 4).

Head. Very finely punctuated, yellowish, shiny. Labrum and mandible blackish. Antenna slender, extended to the middle of elytron, entirely yellowish (Fig. 42A). Third antennomere slightly longer than second; ratio

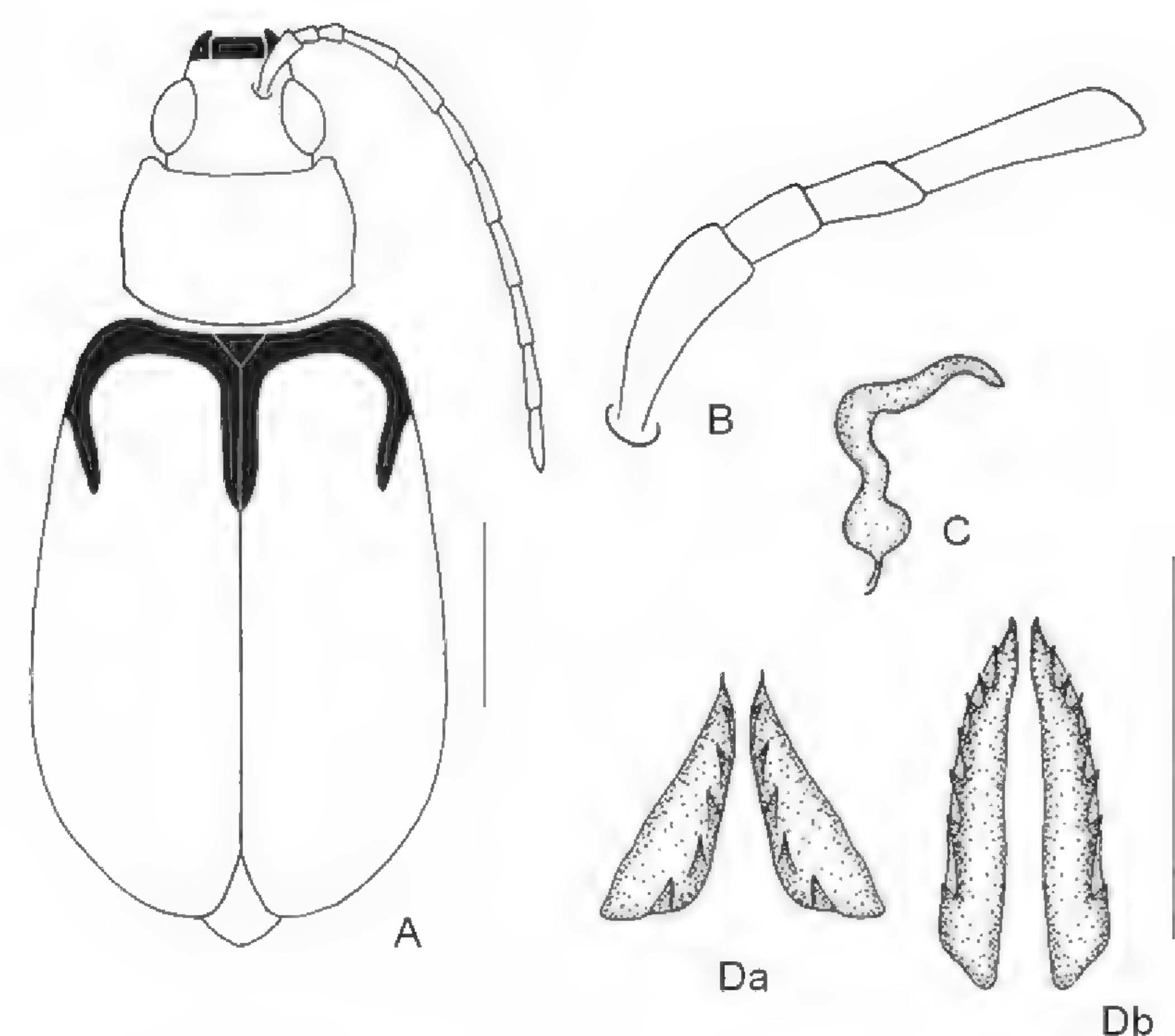


Fig. 42. *Monolepta putri* Mohamedsaid, 2001. A. Colour pattern. B. Basal antennomeres. C. Spermatheca. D. Bursa-sclerites, a. dorsal, b. ventral.

length of second to third antennomere 0.75–1.00 (mean 0.88); ratio length of third to fourth antennomere 0.38–0.44 (mean 0.41; Fig. 42B).

Thorax. Pronotum very finely punctuated, nearly parallel-sided, shiny, entirely yellowish. Pronotal width 1.40–1.45 mm (mean 1.41 mm), ratio length to width 0.64–0.66 (mean 0.65). Scutellum, meso- and metathorax blackish. Elytra entirely yellowish, basal margin, humerus, basal one-fourth of lateral margin, a stripe beyond humerus, and basal one fourth of suture black, given this colouration a “saddle-like” structure (Figs 41b, 42A). Elytral length 3.60–3.80 mm (mean 3.71 mm), maximal width of both elytra together 2.50–2.70 mm (mean 2.63 mm), ratio of maximal width of both elytra together to length of elytron 0.70–0.72 (mean 0.71). Legs yellow.

Abdomen. Yellowish.

Male genitalia. Not known.

Female genitalia. Spermatheca with small spherical nodulus. The middle part is long, cornu short (Fig. 42C). The two pairs bursa sclerites of nearly equal size, both with strong spines (Fig. 42D).

Diagnosis. *Monolepta putri* looks most similar to *M. kuninghitam* sp. nov. Both species have yellowish elytra with black basal and subhumeral margins. Head and pronotum are yellowish, and mouthparts are black in both species. The differences between *M. putri* and *M. kuninghitam* sp. nov. are the yellow antenna of *M. putri*, while it is black in *M. kuninghitam* sp. nov. Pronotum in *M. putri* is broader (ratio length to width 0.64–0.66) than in *M. kuninghitam* sp. nov. (0.71), and the shape of spermatheca are different. That of *M. putri* is with spherical nodulus, while in *M. kuninghitam* sp. nov., spermatheca is very small (42C), most similar to the presumably closer related *M. bifasciata*, *M. rubra*, and *M. rufipennis* (5D, 8D, 37D).

Distribution. Only known from Bali (Fig. 30).

***Monolepta bruneiensis* sp. nov.**

urn:lsid:zoobank.org:act:AE00CBE3-4EC8-4F4D-A7A0-08C866CC2279
Figs 43–45

Type material. Holotype: ♂ “Brunei, E 115 7'N4 34', Kuala Belalong FSC, Dipterocarp forest, Dryobalanops beccarii / BM (NH) 1991-173 / Aerial Malaise 1A 260 m,

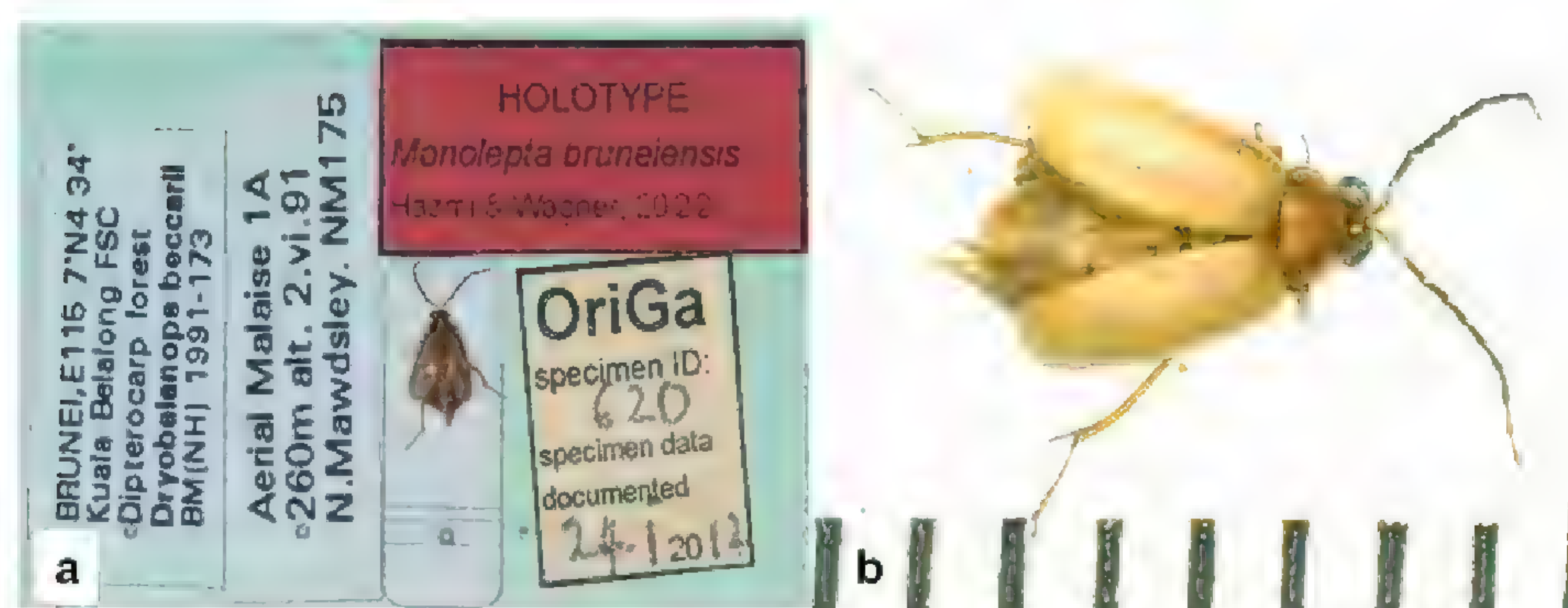


Fig. 43. Type material of *Monolepta bruneiensis* sp. nov., holotype (BMNH).

alt. 2.vi.91 / N. Mawdsley. NM 175” (BMNH; Fig. 43). Type locality: 4°34' N/115°07' E. – Paratypes: 4 ex., same data as holotype (BMNH).

Etymology. The name of the new species refers to the state where it exclusively occurs.

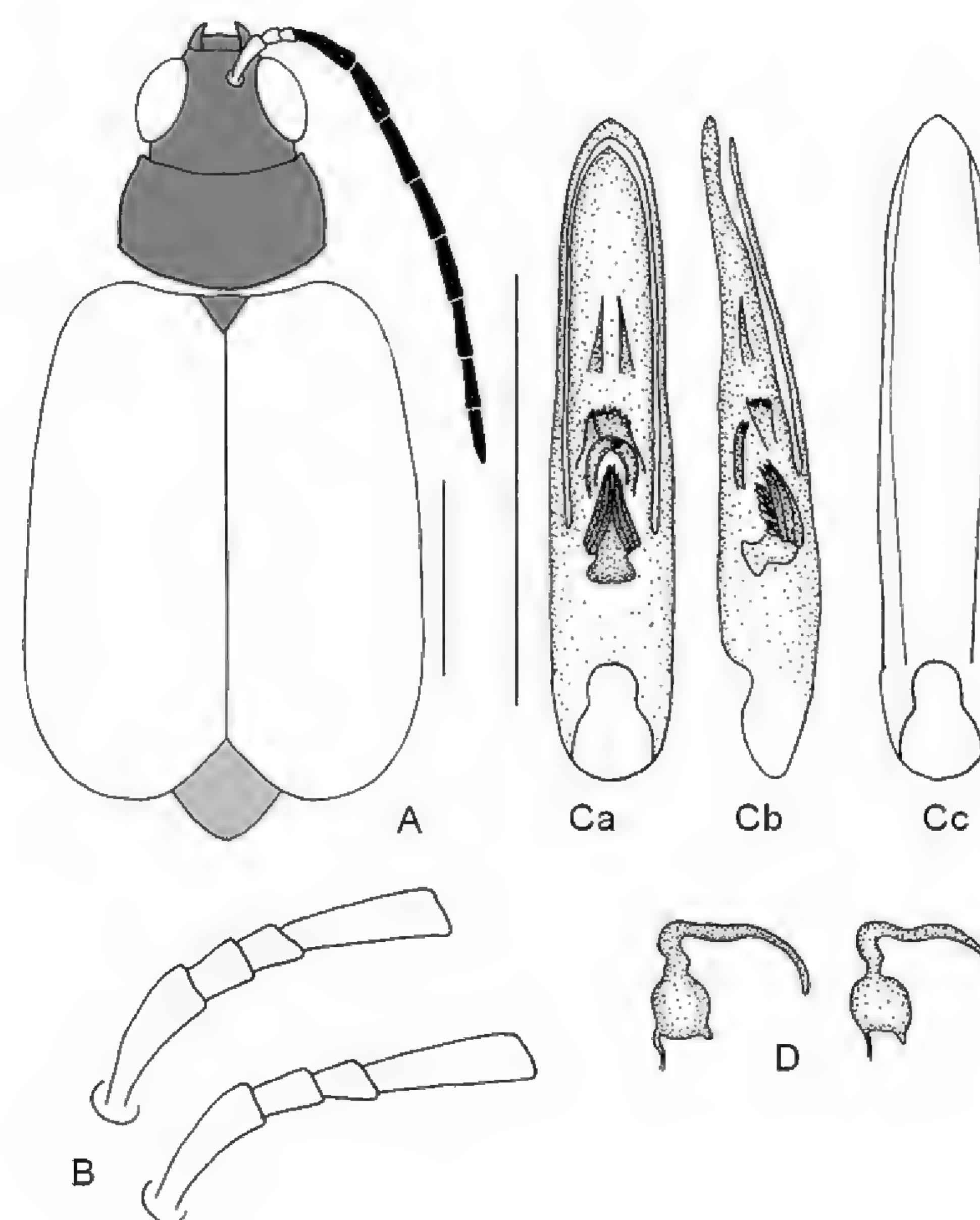


Fig. 44. *Monolepta bruneiensis* sp. nov. A. Colour pattern. B. Basal antennomeres. C. Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. D. Spermathecae. E. Bursa-sclerites, a. dorsal, b. ventral.

Description

Total length. 3.75–4.70 mm (mean 4.26 mm; n = 6).

Head. Very finely punctuated, entirely brownish-red and shining. Labrum and mandible as head, apically a bit darker. Eyes very large. Antenna slender, extending almost to the middle of elytra, blackish and only three basal antennomeres yellow-brownish (Fig. 44A) or the terminal antennomeres more brownish (Fig. 43b). Second antennomere significantly longer than third; ratio length of second to third antennomere 1.00–1.50 (mean 1.25); ratio length of third to fourth antennomere 0.25–0.29 (mean 0.27; Fig. 44B).

Thorax. Pronotum finely punctuated, entirely brownish-red, broad. Pronotal width 1.15–1.30 mm (mean 1.24 mm), ratio length to width 0.56–0.58 (mean 0.57). Scutellum, meso- and metathorax brownish-red. Elytra entirely yellow to yellowish-brown. Elytral length 2.90–3.55 mm (mean 3.19 mm), maximal width of both elytra together 2.20–2.70 mm (mean 2.46 mm), ratio of maximal width of both elytra together to length of elytron 0.75–0.79 (mean 0.77; Fig. 44A). Legs yellowish-brown.

Abdomen. Yellowish-brown.

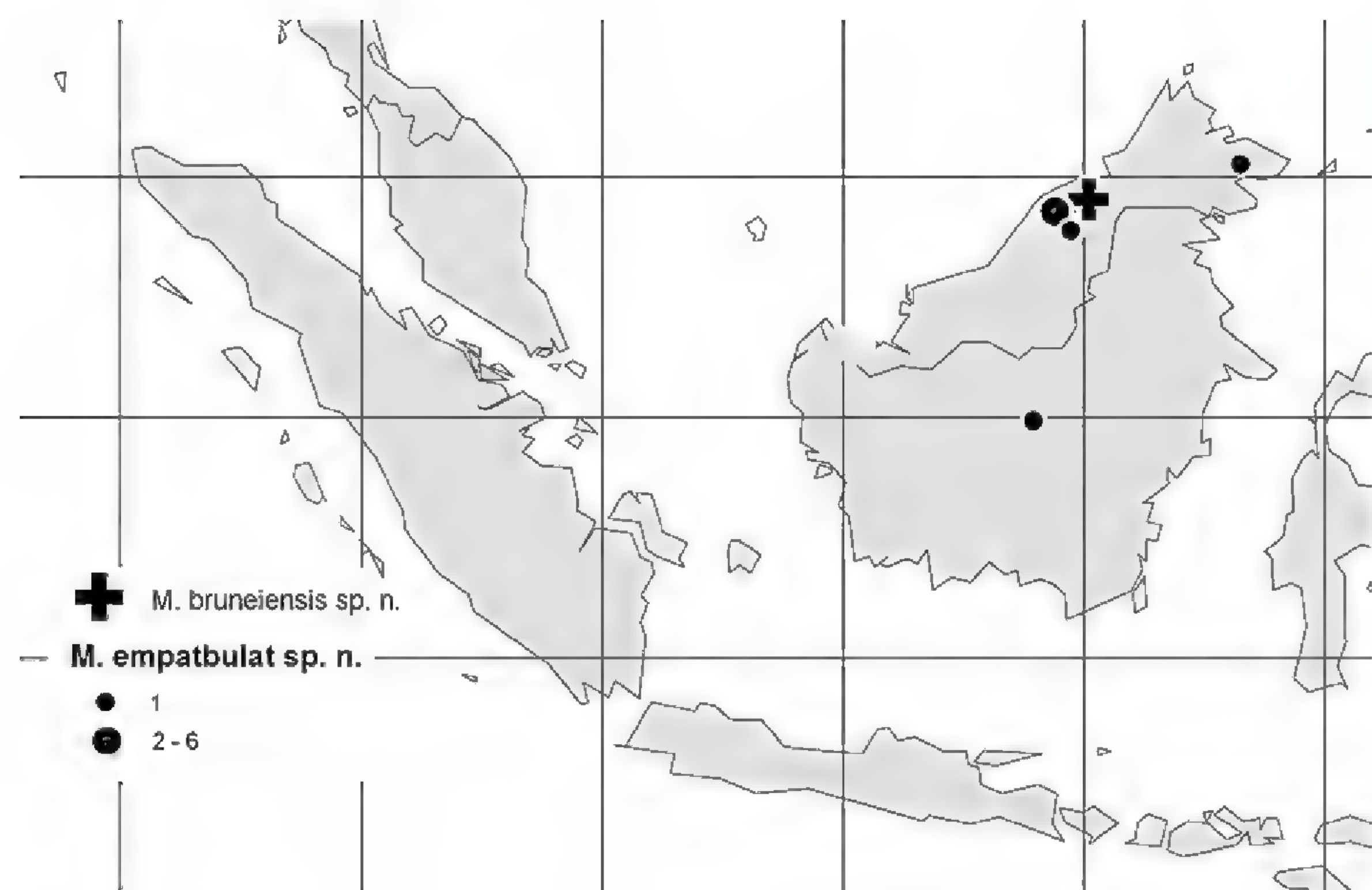


Fig. 45. Distribution of *Monolepta bruneiensis* sp. nov., and *M. emphatbulat* sp. nov.

Male genitalia. Median lobe nearly parallel-sided and slender. Tectum long and broad. Median spiculae broad, flat with comb-like apex, overlapping in dorsal view (Fig. 44Ca), lateral spiculae as simply slender spikes, ventral spiculae slender curved hook (Fig. 44C).

Female genitalia. Spermatheca with spherical nodulus, short middle part and long and slender cornu (Fig. 44D). Bursa sclerites weakly sclerotized and hardly visible.

Diagnosis. *Monolepta bruneiensis* sp. nov. is most similar in body colouration to *M. mentaweiensis* (Figs 29A, 44A). Both species possess a brownish-red pronotum and yellowish elytra, but *M. mentaweiensis*, additionally has a brownish-red transverse basal band on the elytra (in some old specimens, this band is a bit faded) lacking in *M. bruneiensis* sp. nov.. External differences are the very short third antennomere in *M. bruneiensis* sp. nov. (mean of ratio length second to third antennomere 1.25) while it is longer in *M. mentaweiensis* (mean of same ratio 0.80; Figs 29B, 44B), both species can be also differentiated by size (total length *M. bruneiensis* sp. nov. 3.75–4.70 mm; *M. mentaweiensis* 4.90–6.25 mm), and in all doubtful cases, the genitalic characters allow an easy identification.

Distribution. Only recorded from Brunei in North-West Borneo (Fig. 45).

***Monolepta emphatbulat* sp. nov.**

urn:lsid:zoobank.org:act:7640433E-FB08-4E32-956A-20EE24D45BDA
Figs 45–47

Type material. Holotype: ♂ “Brunei, Labi, Bukit Teraja 60 m, Mxt. Dipt. Forest, B.M. 1983-39, Light trap 1, 75 m above ground, 21.VIII.79, S. L. Sutton, 906, 2634” (BMNH; Fig. 46). Type locality: 4°18' N/114°26' E. – Paratypes: **Brunei.** 2 ex., same data as holotype; 3 ex., same data but 24.VIII., 26.VIII. (BMNH). – **Indonesia.** 1 ex., Indonesia, Borneo, Kalimantan Tengah Busang/Rekut conf., 0°03' S/113°59' E, VIII.2001, Brendell/Mendel (BMNH). – **Malaysia.**; 1 ex., Tawai, 1300ft., 8 m S.

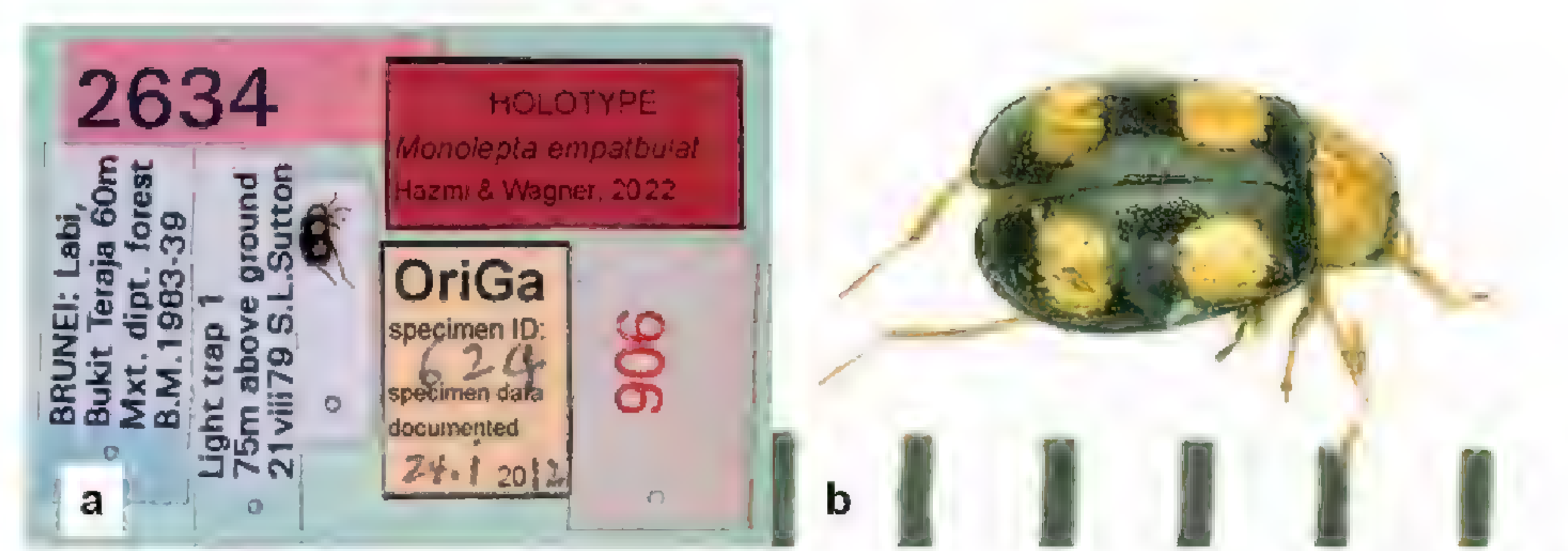


Fig. 46. Type material of *Monolepta emphatbulat* sp. nov., holotype (BMNH).

Telupoid, 5°30' N/117°24' E, IX.1977, M. E. Bacchus (BMNH).

Etymology. The name refers on the elytral colouration with four spots. Empatbulat means “four spots” in Malay.

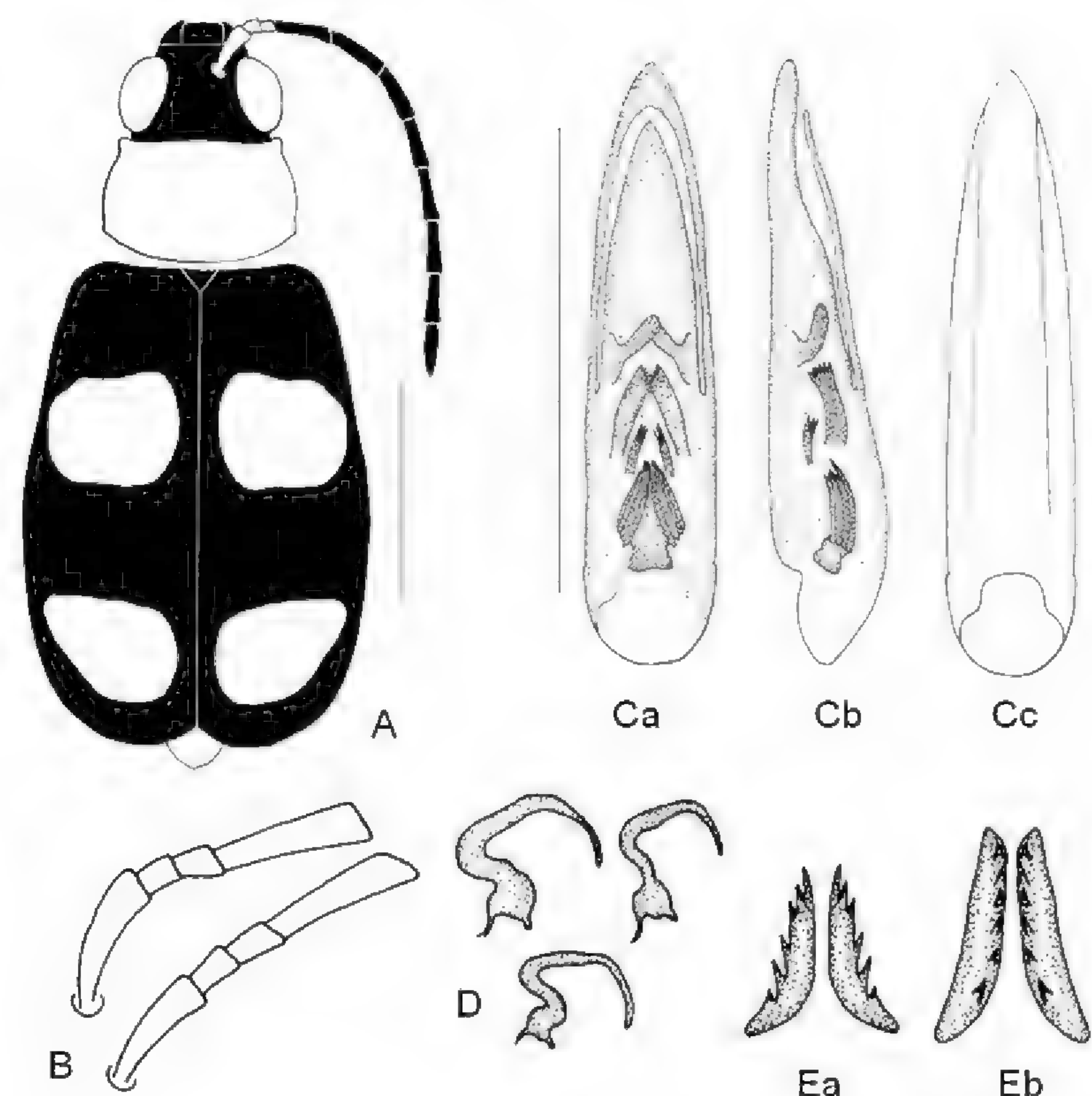


Fig. 47. *Monolepta emphatbulat* sp. nov. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

Description

Total length. 3.25–3.80 mm (mean 3.55 mm; n = 10).

Head. Very finely punctuated, entirely blackish and shining, also labrum and mandible blackish. Antenna long and slender, blackish and only three basal antennomeres yellowish (Fig. 47A). Second antennomere slightly shorter than third; ratio length of second to third antennomere 0.67–1.00 (mean 0.93), ratio length of third to fourth antennomere 0.29–0.43 (mean 0.34; Fig. 47B).

Thorax. Pronotum finely punctuated, broad, entirely yellow to brownish-yellow. Pronotal width 0.95–1.20 mm (mean 1.06 mm), ratio length to width 0.63–0.66 (mean 0.64). Scutellum, meso- and metathorax black. Elytra elongated and broadened towards apex. Elytron black, with four yellowish spots (Fig. 46b, 47A). Elytral length 2.50–2.75 mm (mean 2.67 mm), maximal width of both

elytra together 1.80–2.00 mm (mean 1.92 mm), ratio of maximal width of both elytra together to length of elytron 0.70–0.73 (mean 0.72). Legs yellow-brownish and distal parts of femur and tibia brown to blackish (Fig. 46b).

Abdomen. Yellowish-brown, darker in the middle and apical part of the abdomen.

Male genitalia. Median lobe broad and conical towards apex. Tectum broad at base and narrowing towards apex. Median spiculae of long, slender and flattened, ventral spiculae shorter, club-shaped, jagged-like apically, lateral spiculae club-shaped, basally widened (Fig. 47C).

Female genitalia. Spermatheca with small spherical nodulus, median part and cornu long and slender (Fig. 47D). Bursa sclerites of similar size, strongly sclerotized and with strong spines (Fig. 47E).

Diagnosis. *Monolepta empatbulat* sp. nov. is most similar to *M. mohamedsaidi* sp. nov. and *M. zonula* in colouration and size. These species have a black head, black elytra with yellow spots, and black meso- and metathorax in common. *M. zonula* can be distinguished by yellow antennae (Fig. 25A) from the other two species with predominantly black antenna (Figs. 47A, 56A). The legs of *M. empatbulat* sp. nov. are partly brownish to black, while the other two species have entirely yellow legs. In any doubtful cases the strong differences in the genitalic morphology of both species allow a clear allocation (Figs 25C–E, 47C–E, 56C–E).

Distribution. Only known from Borneo (Brunei, Kalimantan and Sabah; Fig. 45).

***Monolepta hitam* sp. nov.**

urn:lsid:zoobank.org:act:5BC28167-B9D7-4C97-9B9A-E24B7153D593

Figs 26, 48–49

Type material. Holotype: ♂, “Indonesia, Sulawesi Utara, Dumoga-Bone N. P., July 1985 / R. Ent. Soc. London Project Wallace B. M. 195-10 / Tray 60 / Fog 13 230 m, 11.VII.85, BMNH Plot A” (BMNH; Fig. 48). Type locality: 0°32' N/123°58' E. – Paratypes: **Indonesia.** 9 ex., Sulawesi Tengah, Nr. Morowali, Ranu River Area, 27.I.–20.IV.1980, S. L. Sutton & C. J. Rees; M. J. D. Brendell, B. M. 1980-281 (BMNH); 24 ex., same data as holotype, II.–XII.1985 (BMNH); 6 ex., Dumoga Bone N. P. Toraut, 233 m, Sulawesi Utara, 21.V.1985, multistr. Evergreen forest, Rothamstead strap (RMNH); 2 ex., Ed-

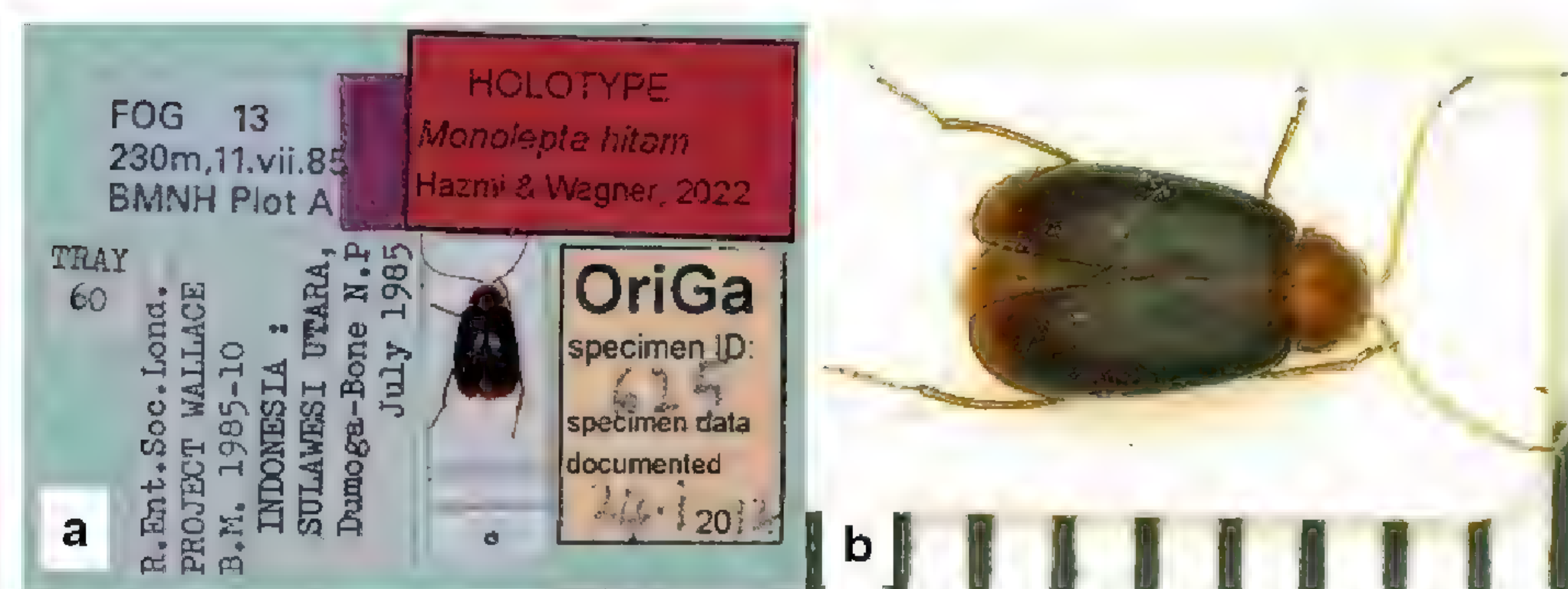


Fig. 48. Type material of *Monolepta hitam* sp. nov., holotype (BMNH).

wards subcamp, 664 m, at light, 2.–5.V.1985, multistr. Evergreen forest, Rothamstead strap (RMNH).

Etymology. The name refers to the elytral colouration; hitam means “black” in Malay language.

Description

Total length. 4.60–6.00 mm (mean 5.16 mm; n = 10).

Head. Very finely punctuated, reddish-brown to dark-brown, labrum and mandible of same colour. Antenna long and slender, extending to the middle of the elytra, yellowish, seventh, eighth and terminal antennomere are partly dark-brown to blackish (Figs 48b, 49A). Second and third antennomere approximately of the same length; ratio length of second to third antennomere 0.78–1.00 (mean 0.95); ratio length of third to fourth antennomere 0.33–0.44 (mean 0.38; Fig. 49B).

Thorax. Pronotum finely punctuated, reddish-brown to dark-brown as head. Pronotal width 1.35–1.60 mm (mean 1.48 mm), ratio length to width 0.63–0.66 (mean 0.64). Scutellum brownish, meso- and metathorax black. Elytron entirely blackish or in some specimens with narrow brownish-red apical margin (Figs 48b, 49A). Elytral length 3.65–4.45 mm (mean 3.98 mm), maximal width of both elytra together 2.50–3.00 mm (mean 2.65 mm), ratio of maximal width of both elytra together to length of elytron 0.64–0.68 (mean 0.67). Legs entirely reddish-brown.

Abdomen. Reddish-brown.

Male genitalia. Median lobe parallel-sided basally and becomes significantly narrow towards apex, tectum also apically narrowed. Median spiculae long and slender,

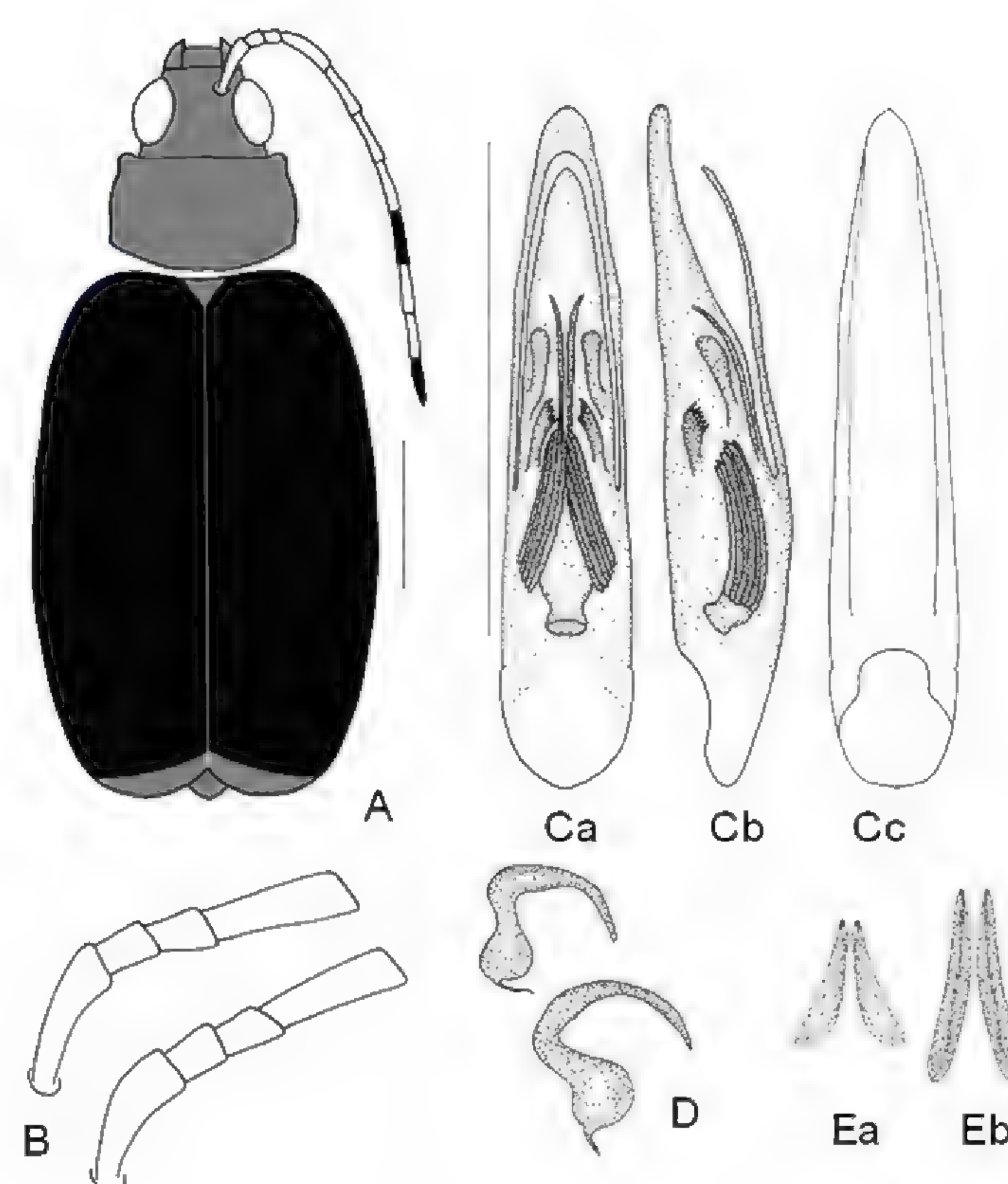


Fig. 49. *Monolepta hitam* sp. nov. A. Colour pattern. B. Basal antennomeres. C. Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. D. Spermathecae. E. Bursa-sclerites, a. dorsal, b. ventral.

few very long, lateral spiculae club-shaped, ventral spiculae club-shaped with spurs at apex (Fig. 49C).

Female genitalia. Spermatheca with spherical nodulus, comparatively large. Cornu long and curved (Fig. 49D). Bursa sclerites of similar size, slender, finely serrate (Fig. 49E).

Diagnosis. *Monolepta hitam* sp. nov. can be easily distinguished from other Sundaland species of *Monolepta* by colouration of the elytra. This is the only species that has almost entirely black elytra, in some specimens, brown reddish at apical margin. Somewhat similar is the equally sized *Monolepta rufipennis* (total length 4.75–6.35 mm; *M. hitam* sp. nov. 4.60–6.00 mm) with black head and pronotum and reddish elytra (Figs 36A). The black seventh and eighth antennomere (Figs 48b, 49A) is also a peculiar character of this new species.

Distribution. Only recorded from two sites on Sulawesi (Fig. 26).

***Monolepta kuninghitam* sp. nov.**

urn:lsid:zoobank.org:act:AD696406-0BA0-4E31-88D9-44CF7386C344
Figs 40, 50–51

Type material. Holotype: ♂, “Sarawak, 4th Division, Gn. Mulu NP, nr. Base Camp 50–100 m, Malaise trap” (BMNH; Fig. 50). Type locality: 3°55' N/114°46' E. – Paratypes: **Indonesia.** 2 ex., Borneo, Sarawei u. Leb. Hara, I.1925, Sammelreise Prof. Dr. H. Winkler ded. 1924–1925 (MNHU). – **Malaysia.** 1 ex., N. Borneo, Bettotan, nr. Sandakan, 5°51' N/118°3' E, VII.1927 (BMNH); 18 ex., Sarawak, Mt. Dulit, 4.000 ft., 3°20' N/114°9' E, VIII.–XI.1932, Hobby & A. W. Moore (BMNH); 28 ex., Sarawak, 4th Division, Gn. Mulu, 3°55' N/114°46' E, V.–VIII.1978, P. M. Hammond & J. E. Marshall (BMNH).

Etymology. The name of the new species refers to the dorsal colouration, yellow and black - kuninghitam in Malay language.

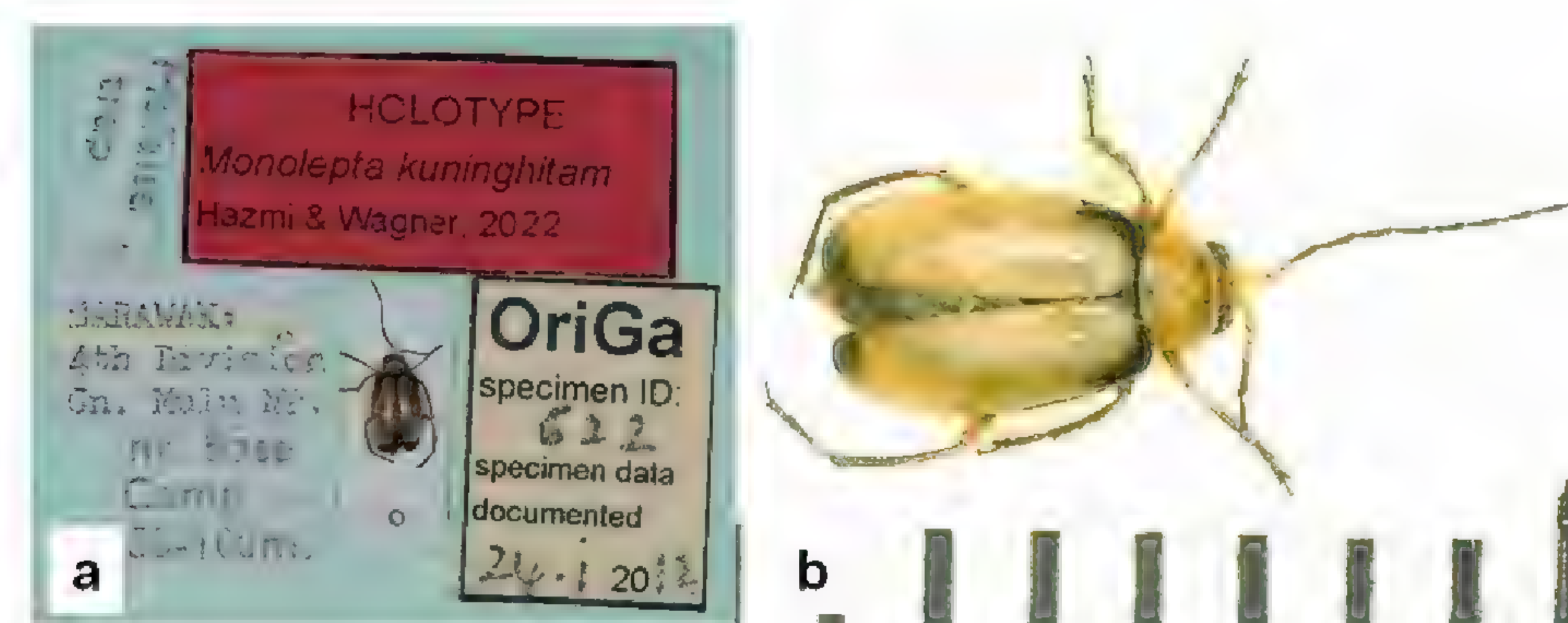


Fig. 50. Type material of *Monolepta kuninghitam* sp. nov., holotype (BMNH).

Description

Total length. 3.70–4.35 mm (mean 3.96 mm; n = 10).

Head. Very finely punctuated, yellow to brownish-yellow, labrum and mandible blackish. Antenna slender, extending almost to the middle of the elytra, blackish and

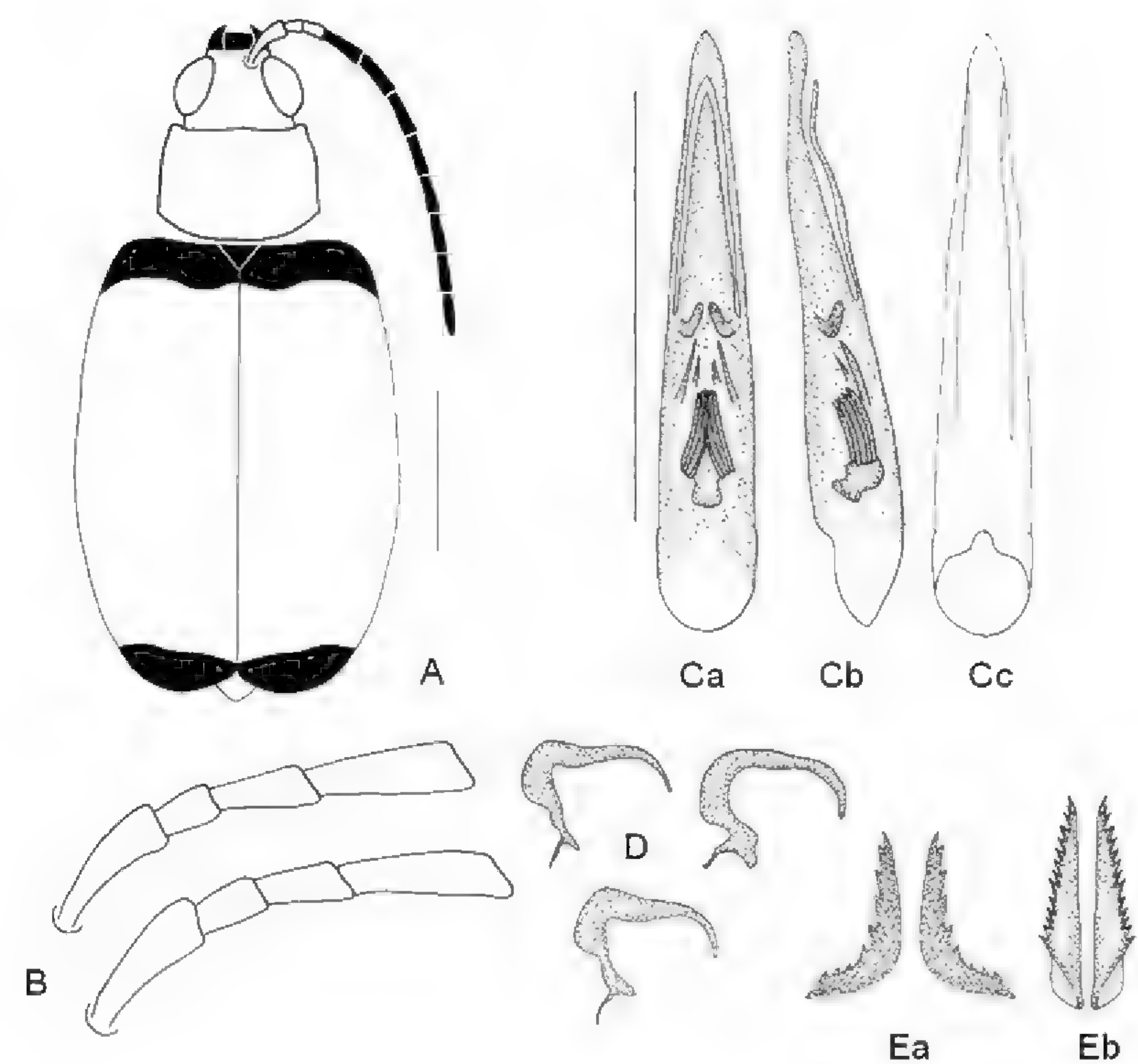


Fig. 51. *Monolepta kuninghitam* sp. nov. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

only three basal antennomeres yellowish (Figs 50b, 51A). Second antennomere shorter than third; ratio length of second to third antennomere 0.67–0.75 (mean 0.69), ratio length of third to fourth antennomere 0.50–0.57 (mean 0.52; Fig. 51B).

Thorax. Pronotum finely punctuated, narrow, yellow. Pronotal width 1.00–1.25 mm (mean 1.09 mm), ratio length to width 0.70–0.73 (mean 0.71). Scutellum, meso- and metathorax blackish. Elytra yellowish, basal margin black, in some specimens also apical margin blackish (Figs 50b, 51A). Elytral length 2.65–3.30 mm (mean 2.94 mm), maximal width of both elytra together 1.90–2.40 mm (mean 2.10 mm), ratio of maximal width of both elytra together to length of elytron 0.70–0.73 (mean 0.72). Femora yellowish, tibiae (with exception of the proximal yellow third), and tarsi dark-brown (Fig. 50b).

Abdomen. Yellowish.

Male genitalia. Median lobe slender, narrow, continuously conical towards apex (Fig. 51C), tectum corresponding slender and pointed. Median spiculae are slender and fine spines, lateral spiculae broad and v-shaped, ventral spiculae are weakly sclerotised (Figs 51Ca, Cb).

Female genitalia. Spermatheca with very small nodulus, broad middle part and slender, curved cornu (Fig. 51D). Bursa sclerites large, of similar size, margins strongly serrate (Fig. 51E).

Diagnosis. The colouration of *Monolepta kuninghitam* sp. nov. is somewhat similar to *M. jacobyi* in some specimens with very narrow black margined elytral base, but antennal colour, very small size and the narrow pronotum of *M. kuninghitam* sp. nov. allow a clear differentiation. Genital structures patterns and size are similar to *M. bifasciata* (Figs 5C–E, 51C–D) and both species are probably closely phylogenetically related. Median lobe,

and pronotum is much slenderer in *M. kuninghitam* (ratio length to width 0.70–0.73), broader in *M. bifasciata* (0.61–0.65).

Distribution. Only known from northern Borneo (Sabah and Sarawak; Fig. 40).

***Monolepta marginicollides* sp. nov.**

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Figs 52–54

Type material. Holotype: ♀ “Johor, Gunung Ledang, 19–23.VI.93, Yusof, Saiful, Meor” (UKM; Fig. 52). Type locality: 2°22' N/102°36' E. – Paratypes: **Brunei.** 1 ex., Labi, Bukit Teraja, 60 m Mxt. Dipt. Forest, 4°18' N/114°26' E, 26.VIII.1979, S. L. Shutton (BMNH). – **Indonesia.** 3 ex., N Sumatra, Bivouac one Mt Bandahara, 3°43' N/97°41' E, 25.VI.–5.VIII.1972, J. Kriken (RMNH); 1 ex., Kalimantan, Timur Apokayan, Long Sungei Barang, 900 m, 1°15' S/116°49' E, 15.–23.II.1997, CuP Zorn (CJB); 1 ex., Borneo, Kalimantan Tengah Busang/Rekut conf., 0°3' S/113°59' E, VIII.2001, Brendell/Mendel (BMNH). – **Malaysia.** 1 ex., Penang, 5°15' N/100°29' E (BMNH); 1 ex., Sarawak, 4th Division, Gn. Mulu NP., 3°55' N/114°46' E, P. M. Hammond et al. (BMNH); 1 ex., Perak, Cameron Highlands, Ringlet, 4°25' N/101°23' E, V.2001, M. Riha (CJB).

Etymology. The name refers to the similarity in colouration pattern to *M. marginicollis*; suffix -oides (grec.): similar as.

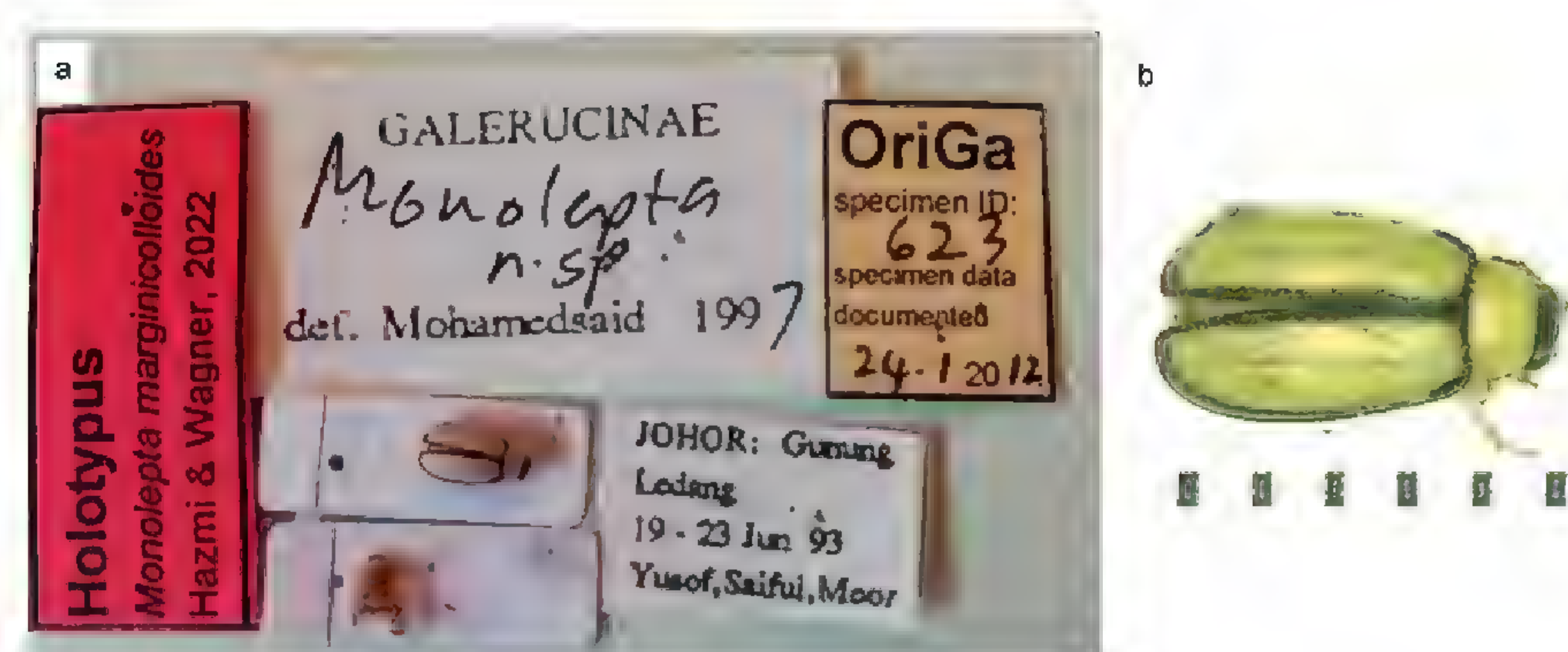


Fig. 52. Type material of *Monolepta marginicollides* sp. nov., holotype (BMNH).

Description

Total length. 3.70–5.10 mm (mean 4.38 mm; n = 6).

Head. Very finely punctuated, blackish and shiny, as labrum and mandible. Antenna long and slender, extending to the middle of the elytra, blackish, only three basal antennomeres yellowish (Figs 52b, 53A). Third antennomere longer than second; ratio length of second to third antennomere 0.67–0.75 (mean 0.69); ratio length of third to fourth antennomere 0.38–0.43 (mean 0.41; Fig. 53B).

Thorax. Pronotum very finely punctuated, broad, entirely yellowish. Pronotal width 1.20–1.55 mm (mean 1.37 mm), ratio length to width 0.58–0.63 (mean 0.60). Scutellum, meso- and metathorax black. Elytron yellow-

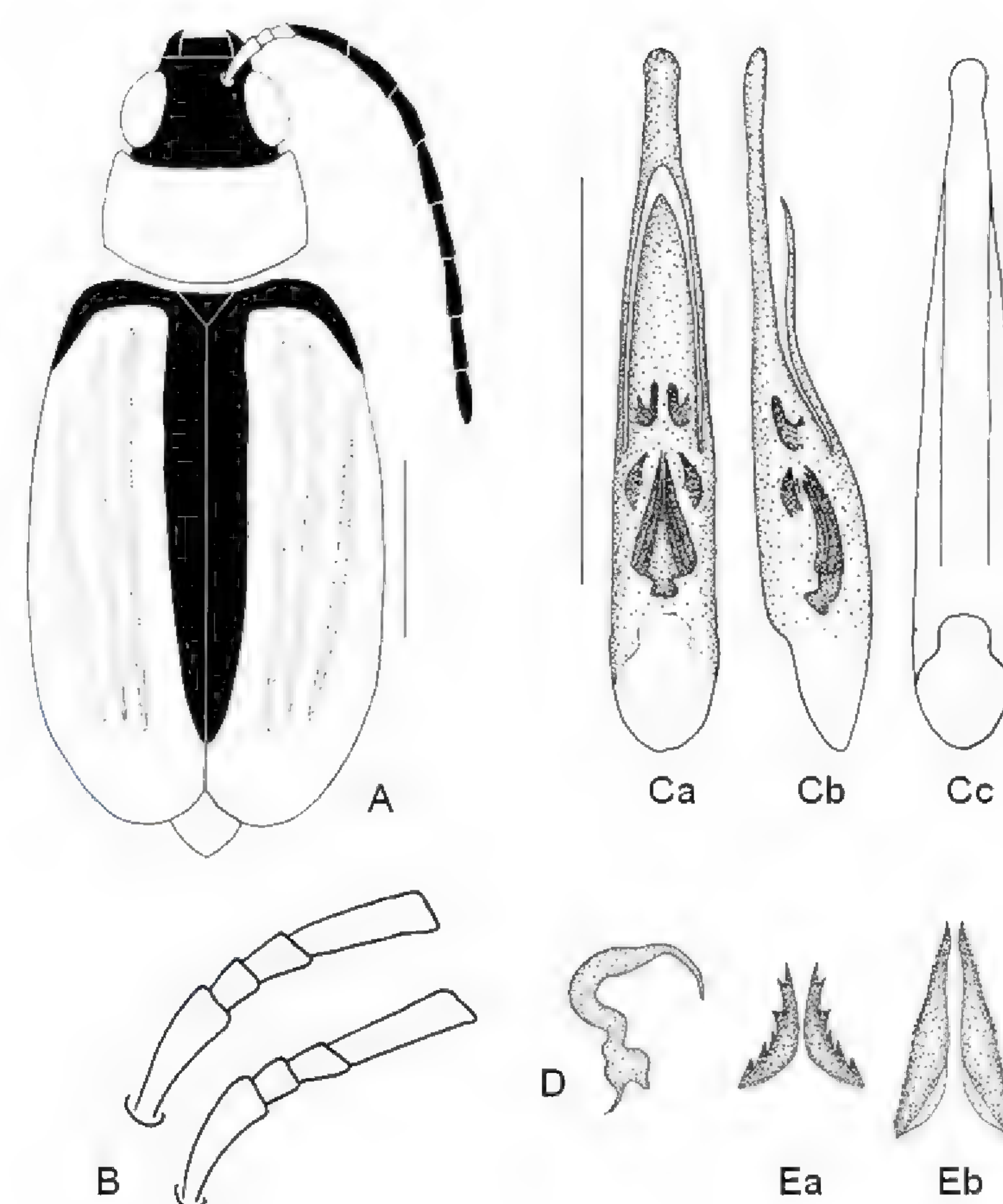


Fig. 53. *Monolepta marginicollides* sp. nov. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

ish with completely black margins (Fig. 52b), or only most parts of the suture, base, and part of margins beyond humerus black (Fig. 53A). Elytral length 2.90–3.95 mm (mean 3.48 mm), maximal width of both elytra together 2.00–2.70 mm (mean 2.38 mm), ratio of maximal width of both elytra together to length of elytron 0.68–0.70 (mean 0.69). Legs entirely yellowish.

Abdomen. Yellowish, darker in the middle of abdomen.

Male genitalia. Median lobe long and strongly narrowed in the apical quarter (Fig. 53C), tectum short, broad at base. Median spiculae fine short bristles, lateral spiculae flattened, v-shaped, ventral spiculae weakly sclerotised as group of small spines (Figs 53Ca, Cb).

Female genitalia. Spermatheca with small spherical nodulus, long and curved median part and cornu (Fig. 53D). Dorsal pair of bursa sclerites with strong spines, ventral part more elongated, with serrate margins (Fig. 53E).

Diagnosis. Colouration pattern very similar to *M. marginicollis*, but *M. marginicollides* sp. nov. is on average larger (total length 3.70–5.10 mm; *M. marginicollis* 3.25–4.00 mm), and elytra are a bit slenderer (ratio of maximal width of both elytra together to length of elytron 0.68–0.70; *M. marginicollis* 0.71–0.74). Other characters to differentiate these species are the yellow-brownish head and vertex with short central black stripe in *M. marginicollis*, while head in *M. marginicollides* sp. nov. is completely black. The genitalic characters are very different and allow a clear differentiation of both species in any doubtful cases (Figs 34C, D, 53C–E).

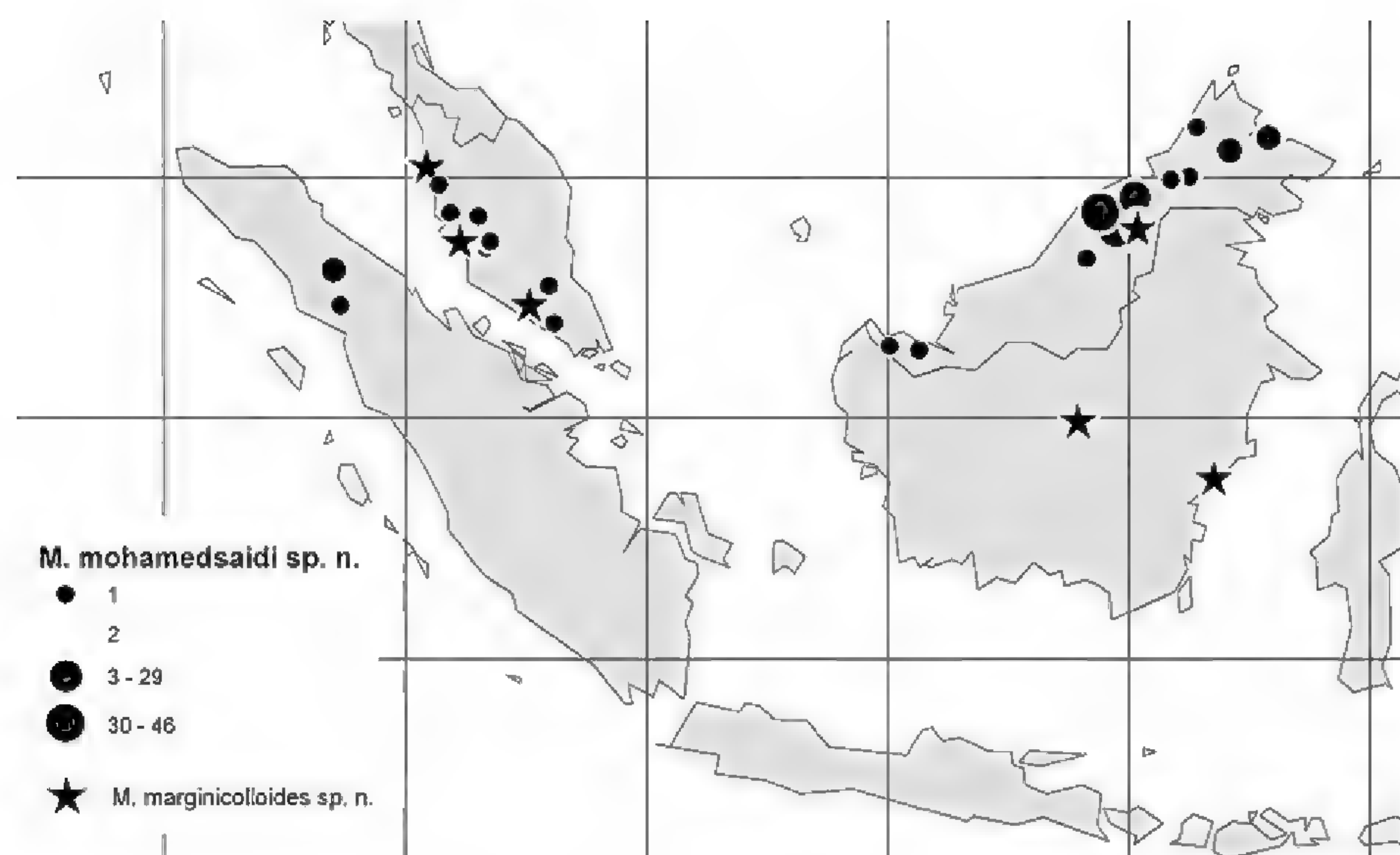


Fig. 54. Distribution of *Monolepta marginicolloides* sp. nov., and *M. mohamedsaidi* sp. nov.

Distribution. Known from Peninsular Malaysia and Borneo (Sarawak, Kalimantan, Brunei) (Fig. 54).

***Monolepta mohamedsaidi* sp. nov.**

[urn:lsid:zoobank.org:act:24851E45-4856-4726-854B-71386D5F4794](https://zoobank.org/act:24851E45-4856-4726-854B-71386D5F4794)

Figs 54–56

Type material. Holotype: ♂ “Sarawak, 4th. Division Gn. Mulu NP / nr. Base Camp 50–100 m, V.–VIII.1978, P. M. Hammond & J. E. Marshall, B. M.1978-49” (BMNH; Fig. 54). Type locality: 3°55' N/114°46' E. – Paratypes: **Brunei.** 46 ex., Labi, Bukit Teraja 60 m, Mxt. Dipt. Forest, 4°18' N/114°26' E, 21.VIII.79, B.M. 1983-39, Light trap 1, 75 m above ground, S. L. Sutton (BMNH); 24 ex., Temburung District Ridge, NE of Kuala Belalong, 300 m, 4°37' N/115°08' E, X.1992, 125W MV Light Trap, J. H. Martin coll. (BMNH); 1 ex., Darussalam, Ulu Temburong NP, 4°32' N/115°9' E, II.2015, P. Kočárek (CJB). – **Indonesia.** 3 ex., N Sumatra, Bivouac one Mt Bandahara, 3°43' N/97°41' E, 25.VI.–5.VIII.1972, J. Krikken (RMNH); 1 ex., N-Sumatra, Hutapadang, 1°25' N/99,28E, VIII.1991, Lichtfang, D. Erber (ZFMK). – **Malaysia.** 1 ex., Penang, 5°24' N/100°29' E, Lam. 93.60 (BMNH); 3 ex., Mt. Matang, W. Sarawak, 1°34' N/110°16' E, I.-II.1914, Bryant coll. (BMNH); 1 ex., W. Sarawak, Quop, 1°37' N/110°24' E, IV.1914, G. E. Bryant (BMNH); 1 ex., Sarawak, foot of Mt. Dulit, Junction of rivers Tinjar & Lejok, 3°20' N/114°09' E, 29.VIII.1932 (BMNH); 1 ex., Malay Penin., Selangor, Bukit Kutu, 3500ft., 3°33' N/101°43' E, 11.IX.1929,

H. M. Pendlebury (BMNH); 2 ex., Sabah, Tawau Plat. 1300 ft., 8 m S. Telupid, 5°35' N/117°07' E, 8.IX.1977, M. E. Bacchus (BMNH); 4 ex., Sarawak, Gunong Mulu Nat. Park, R. G. S. Exped. 1977/78, 3°55' N/114°46' E, 24.VI.1978, J. D. Holloway et al. (BMNH); 24 ex., Sarawak, 4th. Division Gn. Mulu NP, nr. Base Camp 50–100 m, 3°55' N/114°46' E, V.–VIII.1978, P. M. Hammond & J. E. Marshall (BMNH); 2 ex., Sabah, Sandakan, Sepilok FR (obs tower), 50 m, 5°52' N/117°56' E, 1.XI.1987, Krikken & Rombaut (RMNH); 1 ex., Sabah, Interior zone, road Keningau-Sepulut, km 39 Sg. Sook, 350 m, 5.02' N/116.27' E, 17.XI.1987, J. Huisman & R. de Jong (RMNH); 1 ex., Sabah, West coast zone, 12 km NNE of Ranau, Poring hot Springs, 6.04' N/116.42' E, 9.XI.1987, J. Huisman & R. de Jong (RMNH); 1 ex., Sabah, Keningau Area, Tenom, 4°59' N/115°55' E, 23.XI.1987, Krikken & Rombaut (RMNH); 1 ex., Malaysia, Fraser's Hill, 3°42' N/101°44' E, 22.II.1991, RM Exped. (NHRS); 1 ex., Johor, Gunung Ledang, 2°22' N/102°36' E, 19-23.VI.1993, Yusof, Saiful, Meor (UKM); 1 ex., Pahang, Cameron Highlands, Tanah Rata, 4°28' N/101°22' E, 1400 m, II.1997, Schuh & Lang (ZFMK); 1 ex., Pahang, Endau Rompin NP, 2°31'N/103°24' E, IV.2008, P. Čechovsky.

Etymology. Dedicated in honour to Mohammed Salleh Mohamed Said, taxonomist from Malaysia, who did a tremendous work on the South-East Asian Chrysomelidae.

Description

Total length. 3.25–4.00 mm (mean 3.60 mm; n = 10).

Head. Very finely punctuated, varied from yellowish to blackish, labrum and mandible black. Antenna slender, short, extending almost to the middle of elytra, blackish and only three basal antennomeres yellow (Figs 55b, 56A). Second antennomere shorter than third; ratio length of second to third antennomere 0.67–1.00 (mean 0.72); ratio length of third to fourth antennomere 0.50–0.60 (mean 0.53; Fig. 56B).

Thorax. Pronotum finely punctuated, entirely yellow-brownish and shiny. Pronotal width 1.00–1.25 mm (mean 1.12 mm), ratio length to width 0.58–0.62 (mean 0.60). Scutellum, meso- and metathorax black. Elytra shows considerable variation. Almost 80 % has black elytra with longitudinal yellow spot in the middle of the disc (Fig. 55b, 56Ab), others two yellow spot on the first basal half of elytra, and another two spots on the apical part that stretch to elytral margin (Fig. 56Aa). Elytral length 2.50–2.90 mm (mean 2.71 mm), maximal width of both elytra together 1.90–2.20 mm (mean 2.08 mm), ratio of maximal width of both elytra together to length of elytron 0.75–0.79 (mean 0.77; Fig. 56A). Legs entirely yellowish.

Abdomen. Yellowish.

Male genitalia. Median lobe is slender and narrowed towards apex. Tectum is long, lanceolate with marked

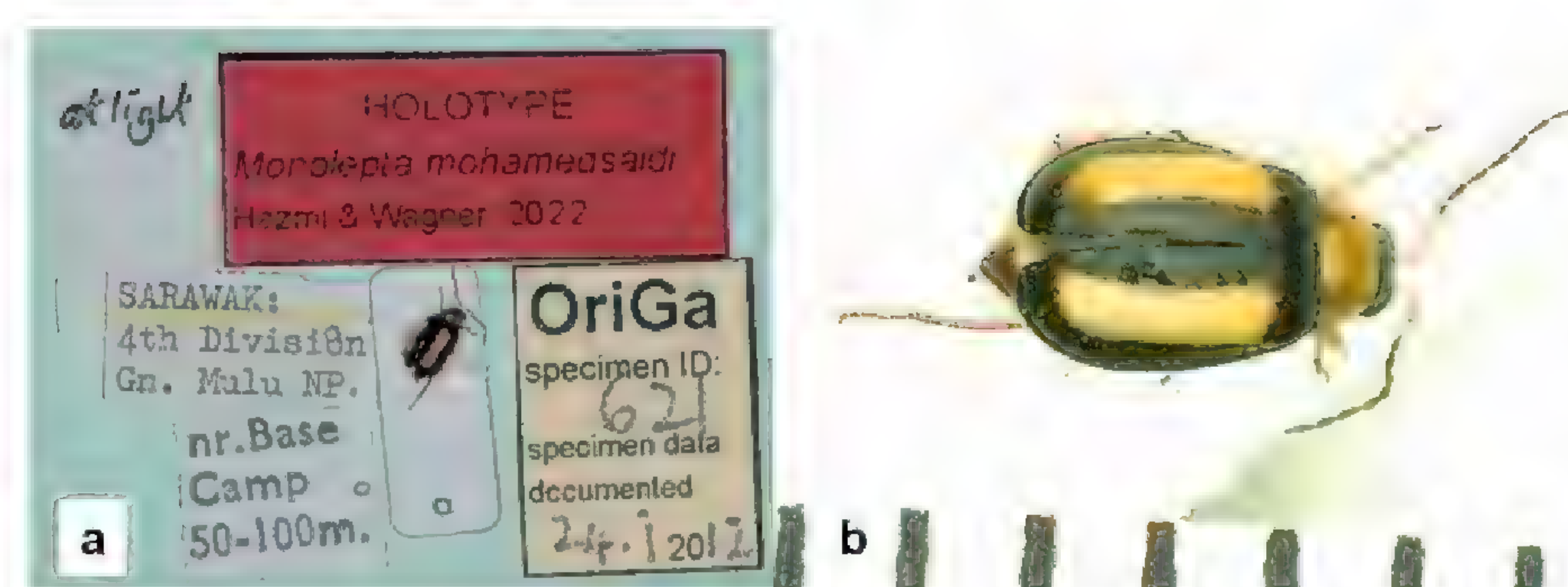


Fig. 55. Type material of *Monolepta mohamedsaidi* sp. nov., holotype (BMNH).

together 1.70–1.90 mm (mean 1.74 mm), ratio of maximal width of both elytra together to length of elytron 0.69–0.73 (mean 0.71; Fig. 58A). Legs yellow.

Abdomen. Yellowish.

Male genitalia. Median lobe lanceolate, becoming slightly towards apex. Median spiculae as few stronger spines, often slightly curved in dorsal view, on base with two horn-shaped structures (Fig. 58Cb), lateral spiculae slender with two small spines apically, ventral spiculae weakly sclerotized and hardly visible or absent (Fig. 58C).

Female genitalia. Spermatheca with small spherical nodulus and long and slender middle part and cornu (Fig. 58D). Bursa sclerites broad, nearly of same size with spiny margins (Fig. 58E).

Diagnosis. *Monolepta ranuensis* sp. nov. is with a total length of 3.25–3.70 mm the smallest “true” species of *Monolepta* from Sundaland area. Somewhat similar is the also unicolorous, but reddish-brown *M. sulawensis* sp. nov. that is of similar size and occurs syntopic at the same place on Sulawesi. In doubtful cases, the genital characters of both sexes allow a clear identification (Figs 58C–E, 60C–E). Also, the shallow transverse pronotal depression, and the elytral punctuation is characteristic for *M. sulawensis* sp. nov. There are several further small completely yellow species described in *Monolepta* (and probably even not yet described) in the region, and in many cases the genitalic dissection only allows an allocation to genus and species.

Distribution. Only recorded from the type locality in Central-Eastern Sulawesi (Fig. 26).

***Monolepta sulawensis* sp. nov.**

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Figs 40, 59–60

Type material. Holotype: ♂ “Sulawesi Tengah, Nr. Morowali, Ranu River Area, 27.I.–20.IV.1980, S. L. Sutton & C. J. Rees; M. J. D. Brendell, B.M. 1980-281” (BMNH; Fig. 138). – Paratypes. 13 ex., same data as holotype, mainly captured by light (BMNH).

Etymology. Patronym.

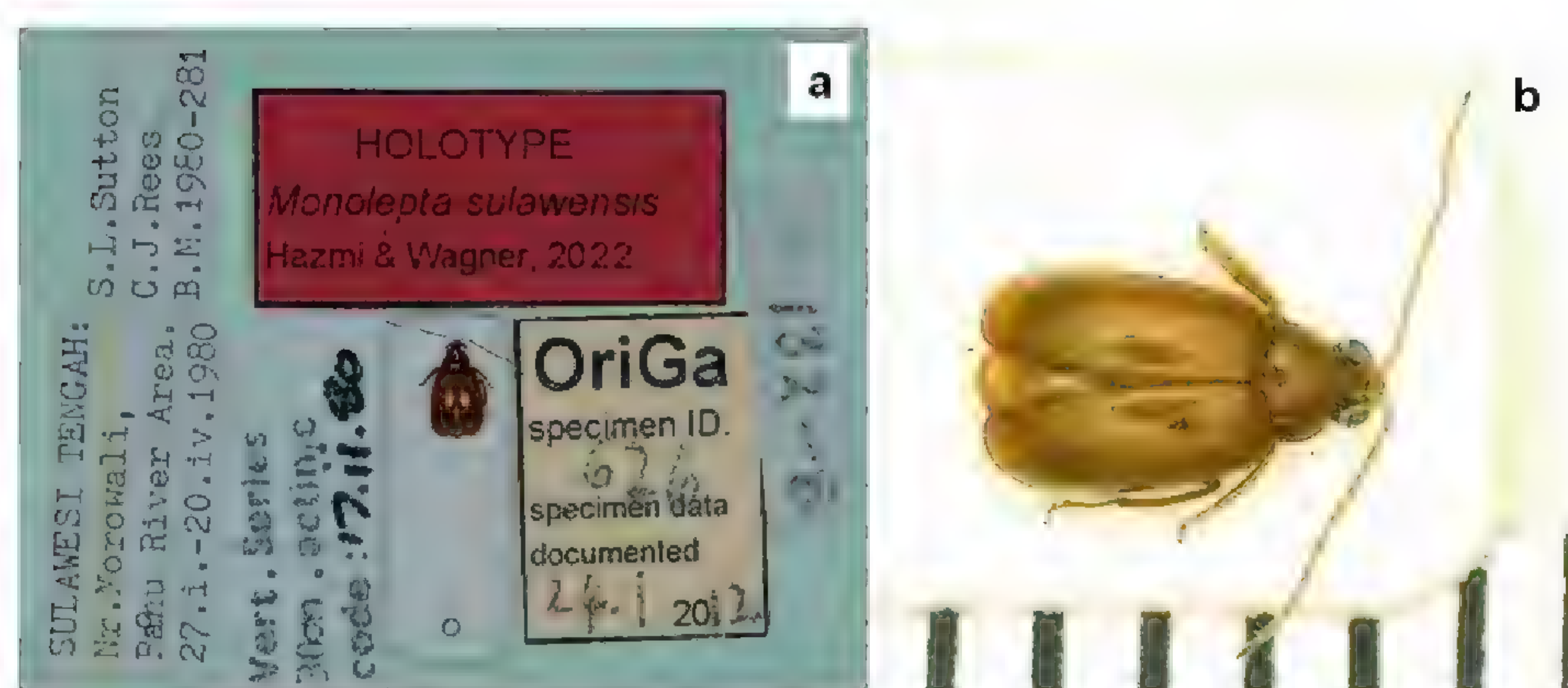


Fig. 59. Type material of *Monolepta sulawensis* sp. nov., holotype (BMNH).

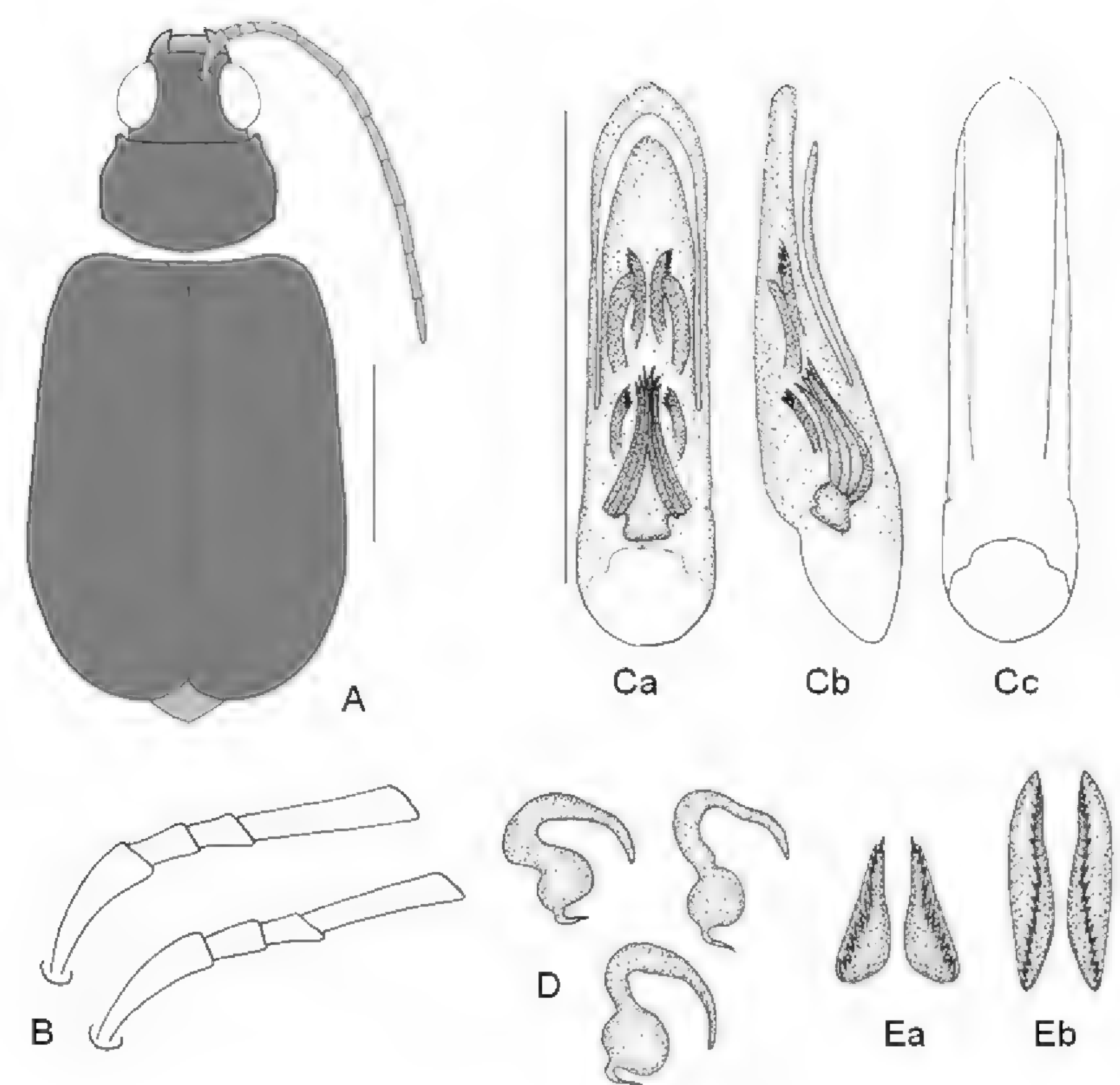


Fig. 60. *Monolepta sulawensis* sp. nov. **A.** Colour pattern. **B.** Basal antennomeres. **C.** Median lobe, a. dorsal, b. lateral, c. ventral, without endophallic structures. **D.** Spermathecae. **E.** Bursa-sclerites, a. dorsal, b. ventral.

Description

Total length. 3.70–4.25 mm (mean 3.90 mm; n = 10).

Head. Very finely punctuated, entirely brownish, as labrum and mandible. Antenna slender, extending to the middle of elytra, brownish, and the last antennomere often a bit darker (Figs 59b, 60A). Third antennomere shorter than second; ratio length of second to third antennomere 1.00–1.50 (mean 1.25); ratio length of third to fourth antennomere 0.37–0.42 (mean 0.38; Fig. 60B).

Thorax. Pronotum very finely punctured, entirely yellowish to reddish-brown, shining and without depression. Pronotal width 1.20–1.25 mm (mean 1.22 mm), ratio length to width 0.60–0.64 (mean 0.62). Scutellum, meso- and metathorax brownish. Elytra entirely yellowish-brown to brownish. Elytral length 2.80–3.40 mm (mean 3.04 mm), maximal width of both elytra together 2.10–2.40 mm (mean 2.20 mm), ratio of maximal width of both elytra together to length of elytron 0.70–0.74 (mean 0.72; Fig. 60A). Legs yellowish-brownish.

Abdomen. Yellowish-brownish.

Male genitalia. Median lobe broad, short, parallel-sided. Group of median spiculae at base and one pair of flattened structures with brushy apex in the middle, lateral spiculae as slightly curved plates, ventral spiculae club-shaped with brushy apex (Fig. 60C).

Female genitalia. Spermatheca with large spherical nodulus, broad middle part, slender cornu (Fig. 60D). Two pairs of differently structured bursa sclerites, both with fine saw-like margins (Fig. 60E).

Diagnosis. *Monolepta sulawensis* look somewhat similar to the also uniformly colored, but pale yellowish *M. ranuensis* sp. nov., but is larger (total length 3.70–4.25 mm, *M. ranuensis* 3.25–3.70 mm). Short third anten-

nomere is also characteristic for *M. sulawensis* sp. nov., as is the genitalic morphology (Figs 58C–E, 60C–E).

Distribution. Only recorded from the type locality in Central-Eastern Sulawesi (Fig. 40).

Identification key

- 1 Elytron bi- or tricolorous, with transverse bands (Figs 5A, 20A, 23A, 29A, 32A), circular yellow spots (Figs 25A, 47A, 56A), or spot with undulate black and yellow colouration (Fig. 14A) **2**
- Elytron predominantly unicolorous, yellow, reddish or black (Figs 8A, 17A, 39A, 44A, 58A, 60A), yellow with black suture and/or basal and lateral elytral margins (Figs 34A, 42A, 51A, 53A), with reddish base (Fig. 3a), or brownish with red elytral tip (Fig. 49A)..... **10**
- 2 Elytron with transverse bands (Figs 5A, 20A, 23A, 29A, 32A)..... **3**
- Elytron with circular or longitudinal yellow spot (Figs 25A, 47A, 56A), or spot with undulate black and yellow colouration (Fig. 14A)..... **7**
- 3 Elytron only with one brown or black transverse band at base, extension varies from very narrow up to one third of elytral length (Figs 29A, 32A) **4**
- Elytron with at least two clearly defined transverse bands (Figs 1b, 4a, 5A, 20A, 23A), rarely subterminal band reduced to spots (Fig. 2b)..... **5**
- 4 Elytron with dark brown to black base, remaining parts of elytron pale reddish-brown, head and pronotum contrasting yellow (Figs 31b, 32A); smaller, total length 3.70–5.40 mm; wide distribution from India to Southeast Asia up to Borneo (Fig. 33) ***M. militaris* Jacoby, 1896**
- Elytron with paler brownish base, other parts more yellow, head and pronotum brownish-red, not or less contrasting to the elytral base (Figs 27b, 29A); larger, total length 4.90–6.25 mm; wide distribution in Sumatra, Borneo, Malaysia, Thailand and Singapore (Fig. 30)..... ***M. mentawaiensis* (Jacoby, 1896)**
- 5 Subapical transverse band ends far from elytral margin (Figs 1b, 4a, 5A), sometimes reduced to small spots (Fig. 2b); smaller, total length 3.70–5.10 mm; pronotum less broad, pronotal width to length 0.61–0.65; spermatheca without spherical nodule (Fig. 5D); widely distributed from India through SE-Asia towards New Guinea (Fig. 6)..... ***M. bifasciata* (Hornstedt, 1788)**
- Subapical transverse band extending to elytral margin (Figs 20A, 23A); larger 4.10–5.80 mm; pronotum broader, pronotal length to width 0.55–0.59 (mean 0.58); spermatheca with spherical nodule (Figs 20D, 23D)..... **6**
- 6 Broad yellowish transverse band bounded above and below by a narrow black band, and another narrow black band on basal margin (19b, 20A), scutellum brown-reddish; median lobe broad, with three types of spiculae (Fig. 20C); widely distributed from India towards Java (Fig. 21) ... ***M. orientalis* Jacoby, 1889**
- Narrow yellowish transverse-band in the middle, broad black at base and narrow black behind the yellow band, brown-reddish in the apical third (Fig. 22b, 23A); scutellum black; median lobe comparatively small, ventral spiculae hardly visible (Fig. 23C); widely distributed from India towards Java (Fig. 21)..... ***M. flavofasciata* Jacoby, 1889**
7. Head and pronotum of same colouration, reddish-brown (Figs 10b–13b, 14A), usually one yellowish spot at elytral base and a second in the apical third, but usually weakly defined, resulting in somewhat undulating colouration on elytra (Figs 10b–12b, 14A), rarely with clearly defined elytral spots (Fig. 13b); total length 3.50–5.25 mm; widely distributed and abundant from Northwest-India and Central China throughout the entire Oriental Region to Luzon, Palawan, Borneo and Java, not known from Wallacea (Fig. 15) .. ***M. signata* (Olivier, 1808)**
- Pronotum yellow, head usually black (rarely yellow), elytron yellow and black only, yellow spots not close to humerus and well defined (Figs 25A, 47A, 56A). **8**
- 8 Elytron black with one circular yellow spot in the middle (Fig 25A), apical third of elytron or at least broad apical margin yellowish, suture sometimes reddish (Fig. 24b), antenna with exception of the terminal antennomere yellow; on average larger, total length 3.50–4.90 mm; Sundaland distribution without Wallacea (Fig. 26) ... ***M. zonula* Weise, 1916**
- Elytron black with two circular yellow spots (Figs 47A) where the hind one can extend to the apical margin (Fig. 56Aa), or longitudinal band (Fig. 56Ab), antenna with exception of the yellow three basal antennomeres black; on average smaller, total length 3.25–4.00 mm **9**
- 9 Pronotum broad, pronotal width to length 0.58–0.62, elytral colouration quite variable (Fig. 56A); median lobe slender (Fig. 56C), bursas sclerites with very strong spines (Fig. 56E); Peninsular Malaysia and Borneo ***M. mohamedsaidi* sp. nov.**
- Pronotum less broad, pronotal width to length 0.63–0.66; elytron with completely black margins and two circular spots (Fig. 47A); median lobe very broad (Fig. 47C), bursa sclerites less spiny (Fig. 47E); restricted to Borneo ***M. empatbulat* sp. nov.**
- 10 Elytron yellow with at least parts of the suture black, usually often also parts of outer margins black (Figs 34A, 42A, 53A)..... **11**
- Elytron entirely yellow (Figs 39A, 44A, 58A), yellow with black base (Figs 17A, 51A), or reddish to black **13**

- 11 Only basal third of suture black, antenna yellow (Fig. 42A); total length 4.60–4.90 mm; endemic in Bali *M. putri* Mohamedsaid, 2001
- Suture mainly black, antenna brown to black (Figs 34A, 53A); Malay Peninsula, Borneo or Sumatra 12
- 12 Head yellow to brownish-yellow, vertex with longitudinal median black spot, outer and basal pronotal margins black (Fig. 34A); smaller, total length 3.25–4.00 mm; median lobe conical (Fig. 34C) spermatheca with large nodule (Fig. 34D); Malay Peninsula, Borneo and Sumatra (Fig. 9) *M. marginicollis* Jacoby, 1896
- Head black, pronotum completely yellow (Fig. 53A); larger, total length 3.70–5.10 mm; median with very slender apical third (Fig. 53C), spermatheca with small nodule (Fig. 53D); Malay Peninsula and Borneo (Fig. 54) *M. marginicolloides* sp. nov.
- Head black or yellow, pronotum completely yellow, very broad sutural and outer margins (Fig. 56Ab); smaller, total length 3.25–4.00 mm; median lobe like Fig. 56C; colouration type of *M. mohamedsaidi* sp. nov. (see 9)
- 13 Elytron entirely yellow (Figs 39, 58) or yellow with black (Figs 17, 51) or reddish (Fig. 3a) base 14
- Elytron unicolorous reddish, brownish or black (Figs 8A, 37A, 60A), or brownish to black with red elytral tip (Fig. 49A) 19
- 14 Elytron entirely yellow (Figs 39A, 44A, 58A); total length 3.25–6.15 mm 15
- Base of yellow elytra black (Fig. 51A), sometimes black colour very narrow (Fig. 17A), or reddish (Fig. 3b) 17
- 15 Head and pronotum contrasting brownish-red, to the yellow elytra; basal antennomeres yellowish to brown, others brown to black (Figs 43a, 44A); second antennomere significantly longer than third, ratio length of second to third antennomere 1.00–1.50 (Fig. 44B); total length 3.75–4.70 mm; endemic to Brunei *M. bruneiensis* sp. nov.
- Pronotum yellow, same color as elytra; antenna entirely yellow (with exception of terminal antennomere, Figs 39A, 58A); second antennomeres not shorter than third (Figs 39B, 58B) 16
- 16 Head black, strong contrast to yellow pronotum (Fig. 39A); larger, total length 4.75–6.15 mm; median lobe very short and broad (Fig. 39C); Malay Peninsula, Borneo, Sumatra and Java (Fig. 40) *M. tiomanensis* Mohamedsaid, 1999
- Head and pronotum of same colour (Fig. 58A); much smaller, total length 3.25–3.70 mm; median lobe slender, conical (Fig. 58C); endemic to Sulawesi (Fig. 26) *M. ranuensis* sp. nov.
- 17 Very large, total length 6.40–7.70 mm; pronotum broad, pronotal width to length 0.59–0.61 (Fig. 17A); black basal elytral margin very fine; antenna yellow; widely distributed in Sundaland (Fig. 18) *M. jacobyi* Weise, 1908
- Much smaller, total length 3.70–4.35 mm 18
- 18 Pronotum less broad, pronotal width to length 0.70–0.72 (Fig. 51A); broad black basal elytral margin and also elytral tip black; outer antennomeres black; endemic to Borneo *M. kuninghitam* sp. nov.
- Pronotum broader, pronotal width to length 0.61–0.65; elytra reddish to brownish at base (Fig. 3b); ; rare colour pattern of *M. bifasciata* (see 5)
- 19 Elytron dark brown to black with reddish apex (Fig. 49A); total length 4.60–6.00 mm; endemic to Sulawesi *M. hitam* sp. nov.
- Elytron unicolorous reddish, brownish or black ... 20
- 20 Small, total length 3.70–4.40 mm; median lobe broad (Fig. 60C), spermatheca with spherical nodule (Fig. 60E); endemic to Sulawesi *M. sulawensis* sp. nov.
- Larger, total length 4.50–6.35 mm, median lobe slender (Figs 8C, 37C), spermatheca without spherical nodule (Figs 8E, 37E); unknown from Sulawesi 21
- 21 Head, pronotum and underside black, elytron reddish-brown (Figs 36b, 37A); median lobe broad (Fig. 37C); Malay Peninsula only *M. rufipennis* Jacoby, 1899
- Upper- and underside uniformly brownish-red, outer elytral margins gradually darker (Figs 7b, 8A); median lobe slender (Fig. 8C); Java, Borneo and adjacent islands (Fig. 9) *M. rubra* (Gyllenhal, 1808)

Checklist of *Monolepta* Chevrolat, 1836 from Sundaland

The following list comprises all known species of *Monolepta* after revision including synonymies:

- Monolepta bifasciata* (Hornstedt, 1788)
Chrysomela bifasciata Hornstedt, 1788
 = *Cryptocephalus multicolor* Gmelin, 1790
 = *Crioceris quadrinotata* Fabricius, 1801
 = *Luperodes latefascia* Motschulsky, 1858
 = *Monolepta parvonotata* Jacoby, 1886; syn. nov.
 = *Monolepta mustaphai* Mohamedsaid, 1997; syn. nov.
 = *Monolepta entimauensis* Mohamedsaid, 1998; syn. nov.
- Monolepta bruneiensis* sp. nov.
- Monolepta empatbulat* sp. nov.
- Monolepta flavofasciata* Jacoby, 1889
- Monolepta hitam* sp. nov.
- Monolepta jacobyi* Weise, 1908
- Monolepta kuninghitam* sp. nov.
- Monolepta marginicollis* Jacoby, 1896
- Monolepta marginicolloides* sp. nov.

Monolepta mentaweiensis (Jacoby, 1896)
Candezea mentaweiensis Jacoby, 1896
 = *Monolepta basalis* Jacoby, 1884
 = *M. hageni* Weise, 1916; syn. nov.
Monolepta militaris Jacoby, 1896
Monolepta mohamedsaidi sp. nov.
Monolepta orientalis Jacoby, 1889
 = *Monolepta konbiriensis* Duvivier, 1891
Monolepta putri Mohamedsaid, 2001
Monolepta ranuensis sp. nov.
Monolepta rubra (Gyllenhal, 1808)
 = *Luperodes javanensis* Jacoby, 1887
Monolepta rufipennis Jacoby, 1899
Monolepta signata (Olivier, 1808)
Galeruca signata Olivier, 1808
 = *Crioceris neglecta* Sahlberg, 1829: 29
 = *Luperodes quadripustulatus* Motschulsky, 1858
 = *Luperodes hieroglyphicus* Motschulsky, 1858
 = *Monolepta elegantula* Boheman, 1859: 183
 = *Luperodes dorsalis* Motschulsky, 1866: 415
 = *Luperodes quadriguttata* Fairmaire, 1887: 333
 = *Monolepta picturata* Jacoby, 1896; syn. nov.
 = *Monolepta simplex* Weise, 1913
Monolepta sulawensis sp. nov.
Monolepta tiomanensis Mohamedsaid, 1999
Monolepta zonula Weise, 1916

Species of *Monolepta* transferred to other genera

The following list comprises species originally described in *Monolepta* known from the core of Sundaland without the Philippines (except of Palawan), Thailand and Indo-China, or, as a positive list, comprises species known from the states of Malaysia, Singapore, Brunei and Indonesia without parts East of the Lydekker line, i.e., including the fauna of Sulawesi, Timor and Seram up to the East (Lohmann et al. 2011). Some of these species have been synonymized or transferred by us to other genera, others need to be transferred to other genera in subsequent studies, since they are not con-generic with *Monolepta* s. str.

Our decision to not include the following taxa in *Monolepta* is based on a check of most of the type material. Similar to the taxonomic revision on base of monophyletic groups of the Afrotropical galerucine fauna, with nearly 50 papers published up to now, also for the oriental taxa tremendous revisionary work needs to be done. We started this with revisions on *Ochralea* (Hazmi & Wagner 2010a), *Arcastes* (Hazmi & Wagner 2010b, 2010c), *Neolepta* (Hazmi & Wagner 2013) and the redescription of the generotype of *Paleosepharia* (Rizki et al. 2016). On base of those results, several of the following species belong to *Paleosepharia*, but up to now only one transferral has been published (Rizki et al. 2014). Species of *Nadrana* Baly, 1865 from Sundland have been also revised recently (Zulfadli et al. 2015), and there might be

also few species from the following list that need to be transferred to this group.

Monolepta aemula Weise, 1922
 Synonym of *Paraneolepta imitans* (Jacoby, 1894) (Hazmi & Wagner 2013)
Monolepta affinis Jacoby, 1886
Monolepta albofasciata Jacoby, 1884
Monolepta approximans Jacoby, 1896
Monolepta azlani Mohamedsaid, 1998
 Transferred to *Paleosepharia* (Rizki et al. 2014)
Monolepta bimaculata (Hornstedt, 1788)
Monolepta borneensis Mohamedsaid, 1994
Monolepta c-album (Jacoby, 1899)
Monolepta cantik Mohamedsaid, 2000
Monolepta castanea Allard, 1888
Monolepta castanoptera Weise, 1924
Monolepta danumica Mohamedsaid, 1993
Monolepta erythromelas Weise, 1922
 Synonym of *Ochralea nigripes* (Olivier, 1808) (Hazmi & Wagner 2010a)
Monolepta foveicollis Baly, 1888
Monolepta haemorrhoidalis (Fabricius, 1801)
Monolepta impressicollis (Jacoby, 1896)
Monolepta inornata (Jacoby, 1894)
Monolepta irpa Mohamedsaid, 2000
Monolepta kedenburgi Weise, 1922
 Transferred to *Nadrana* (Zulfadli et al. 2015)
Monolepta kenit Mohamedsaid, 2000
Monolepta kerangas Mohamedsaid, 1998
Monolepta kraepelini Weise, 1922
Monolepta latefasciata Jacoby, 1896
Monolepta laticornis (Jacoby, 1899)
Monolepta longitarsis Jacoby, 1896
Monolepta malaysiana Mohamedsaid, 1993
Monolepta melancholica Jacoby, 1886
Monolepta merah Mohamedsaid, 1993
Monolepta modigliani Jacoby, 1896
Monolepta moluquensis Allard, 1888
Monolepta murphyi Mohamedsaid, 2002
Monolepta nigriceps Weise, 1915
Monolepta nigrilabrum (Jacoby, 1899)
Monolepta nigripes (Olivier, 1808)
 Revalidated as *Ochralea nigripes* (Olivier, 1808) (Hazmi & Wagner 2010a)
Monolepta nigromarginata Jacoby, 1896
Monolepta obtusa Jacoby, 1896
Monolepta pagi Mohamedsaid, 2001
Monolepta parva Mohamedsaid, 2001
Monolepta pectoralis Boheman, 1859
Monolepta piceola Weise, 1915
Monolepta rubricollis Jacoby, 1905
Monolepta rugosa Mohamedsaid, 1998
Monolepta sangirensis Jacoby, 1894
Monolepta semifovea Mohamedsaid, 1993
Monolepta sexmaculata Jacoby, 1886

Monolepta subsulcata Boisduval, 1835
Monolepta thoracica (Jacoby, 1896)
Monolepta terminata (Guérin-Méneville, 1830)
Monolepta tibowensis Mohamedsaid, 2000
Monolepta timorensis Jacoby, 1894
Monolepta unicolor Jacoby, 1886
Monolepta wallacei Baly, 1888
Monolepta wangkliana Mohamedsaid, 2005
 Transferred to *Ochralea* (Hazmi & Wagner 2010a)
Monolepta wilsoni Kimoto, 1989

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